

# DeploymentManager Ver6.2

## **Installation Guide**

-First Edition-

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### Introduction

## **Target Audience and Purpose**

This "Installation Guide" is intended for system administrators who perform DPM installation, upgrade installation, uninstallation, and initial setup, and explains each method.

### **Document Structure**

- 1 Before Installing DPM: Carefully read this section before installation.
- 2 Installing DPM: This section describes how to install DPM.
- 3 Upgrading DPM: This section describes how to upgrade DPM.
- 4 Uninstalling DPM: This section describes how to uninstall DPM.
- 5 Preparing for DeploymentManager Operation: This section describes how to configure the initial setup for DPM.

#### **Appendices**

Appendix A Silent Installation

Appendix B Configuring the Package Web Server

Appendix C Configuring NFS Server Appendix D Configuring Database Server

Appendix E Upgrading SQL Server

Appendix F Configuring DPM Server and MasterScope Network Manager on the Same Machine

Appendix G Revision History

## **DeploymentManager Manual Organization**

DPM manuals are structured as described below.

The name of each manual is described in this manual according to the "Name in this Manual".

Name of Manual	Name in this Manual	Role of Manual
DeploymentManager	First Step Guide	Intended for DPM users. Provides a product
Ver6.2 First Step Guide		overview, and describes the various
		functions, system design methods,
		operating environment and so on.
DeploymentManager	Installation Guide	Intended for system administrators who
Ver6.2 Installation Guide		install DPM. Describes tasks such as how to
		install, upgrade, and uninstall DPM.
DeploymentManager	Operation Guide	Intended for system administrators who
Ver6.2 Operation Guide		operate DPM. Describes the environment
		setup procedure for the operation and the
		operational procedure based on an actual
		flow.
DeploymentManager	Reference Guide	Intended for system administrators who
Ver6.2 Reference Guide		operate DPM. Describes DPM operations on
		the screen, tools, maintenance-related
		information, and troubleshooting. This guide
		is a supplement to the Installation Guide and
		the Operation Guide.

The latest information of DPM can be obtained from the following product site: http://www.nec.com/masterscope/deploymentmanager/index.html

The Reference Guide is not included in the installation media, and is only available on the product site.

### **Documentation Guidelines**

The following describes important points regarding the notation used in this manual.

■ The notation used for DPM products is as follows:

Notation in this Manual	Product Name
DPM unbundled product	DeploymentManager Ver6.2
SSC product	DeploymentManager Ver6.2 for SSC(*1)

\*1

This is a product that is bundled with SigmaSystemCenter and VirtualPCCenter.

- The screen images in this manual are based on the DPM unbundled product. The license related displays are only for the DPM unbundled product. They are not displayed for SSC products.
- Product versions are expressed as follows.

Common description for DPM Ver6.2: DPM Ver6.2 Specific description for DPM Ver6.2x: DPM Ver6.2x

- The installation media included with the DPM product is called "Installation media" in this manual.
- IPv4 address is described as "IP address" and IPv6 address is described as "IPv6 address".
- 32bit OS is described as "x86" in this manual and 64bit OS is described as "x64".
- In Windows OS, the folder path in which DPM is installed or the registry key is displayed by those of x86. When you use x64, replace as the following if there is no notice in particular.

DPM installation folder

- (x86):C:\Program Files\NEC\DeploymentManager
- (x64):C:\Program Files (x86)\NEC\DeploymentManager
- (x86):C:\Windows\system32
- (x64):C:\Windows\SysWOW64

#### Registry key

- (x86):HKEY\_LOCAL\_MACHINE\SOFTWARE\NEC\DeploymentManager
- (x64):HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager

<sup>\*</sup> **x** means revision number.

■ The meaning of each icon used in this manual is as follows:

Icon	Explanation
(Important)	Important items.
	These are items you need to be careful when you operate DPM not depending on
	the using environment.
Note	Cautionary items.
	These are items you need to be careful in the specific environment or operations.
Tips	Supplementary items.
	These are informations to use DPM more conveniently.

The displays and procedures of DPM may differ according to the operating system used. In the case of Windows OS, this document is based on Windows Server 2008 and Windows 7, in principle. Replace when you use DPM on the OS except Windows Server 2008 and Windows 7. (There are some descriptions based on the OS except Windows Server 2008 and Windows 7.) Example)

The procedure for checking the DPM version differs by operating system as follows:

- ·For Windows Server 2012/Windows 8:
- 1) In Windows desktop, set the mouse pointer in the upper right (or the lower right) and select **Settings** from the charm.
- 2) Settings screen appears. Select Control Panel -> Program -> Programs and Features.
- ·For Windows Server 2008/Windows 7/Windows Vista:

From the Start menu, click Control Panel -> Programs and Features.

- \* When "Version" is not displayed, perform the following procedure 1) and 2).
- 1) Right-click Name in the center of the screen, and select More.
- 2) In the Choose Details screen, select the Version check box and click OK.
- ·For an OS except than the above
- From the Start menu, click Control Panel -> Add or Remove Programs. (or Add/Remove Programs)
- 2) Select the applicable component, and click Click here for support information.
- About Windows Server 2003 R2 or Windows Server 2008 R2, follow explanation of Windows Server 2003 or Windows Server 2008 unless Windows Server 2003 R2 or Windows Server 2008 R2 is specified explicitly.
- In descriptions of operation procedures, arbitrary names to be specified by the user(instance name of the database and so on) are described in bold and italics as follows: *Instance Name*. Example)
  - · Restart the following service.
    - SQL Server(Instance Name)
  - In the tree view, click **Resource** icon -> **Scenarios** icon -> **Scenario** Group icon.
- The description of SQL Server in this manual is based on SQL Server 2012 SP1 Express that is included in the installation media. Replace it when you use the product except SQL Server 2012 SP1 Express.

Example)

DPM database path

- ·For SQL Server 2012 SP1 Express x86:
  - C:\Program Files\Microsoft SQL Server\MSSQL11. Instance Name\MSSQL\Binn
- ·For SQL Server 2008 R2 SP1 Express x86:
  - C:\Program Files\Microsoft SQL Server\MSSQL10\_50.DPMDBI\MSSQL\Binn
- ·For SQL Server 2005 Express Edition x86:
  - C:\Program Files\Microsoft SQL Server\MSSQL.x\MSSQL\Binn
- \* **x** means the number of the instance.

- Execute following procedures when **Finish DPM related tasks** appears in this document.
  - If a scenario is running, wait until the scenario is completed.
  - ·If an automatic update is in progress, wait until the automatic update is completed.
  - If you are operating the Web Console or the DPM tools, end them.
- 1MByte is calculated as 1024KByte. 1GByte is calculated as 1024MByte.

# 1. Before Installing DPM This chapter describes how to read this manual and outlines the precautionary notes for DPM

installation.

# 1.1. DeploymentManager Ver6.2 DVD Configuration

The DPM installer and software components are provided on the DPM Ver6.2 installation media DVD as follows. The following is the DPM Ver6.2 unbundled product configuration.

DeploymentManager 6.2 DVD	
  - dotNet Framework40	.NET Framework 4 re-distributable package
  - License 	Product license for the OSS module bundled with the product
  - Linux 	Linux related module
  - MANUAL 	User's guide
  - Setup	Setup module
L TOOLS	Tools
Autorun.inf autorun.exe Launch.exe	Launcher execution module

# 1.2. Check and Set the Installation Environment

This section describes the procedure for DPM unbundled product. Some parts of this procedure will vary from those for SSC product. For SSC product, see *SigmaSystemCenter Installation Guide* as well.

Before installing DPM, check and set up the following.

Item	When Checking Is Required	Reference
Check system configuration and operating environment	Before installing DPM	See Section 2.1, "Examining the System Configuration of DeploymentManager" in First Step Guide.
Set up network environment	Before installing DPM	See Section 2.2.1, "Regarding the Network Environment" in <i>First</i> Step Guide.
Installing Internet Information Services (IIS)	When IIS is not installed on the Management Server	See Section 1.2.1, "Installing Internet Information Services (IIS)" in this manual.
Installing JRE	<ul> <li>When you use the following functions by Image Builder</li> <li>To create Linux installation parameter files for OS clear installation</li> <li>To create Linux disk duplication data files or</li> <li>When you use PackageDescriber</li> </ul>	Download JRE7(Windows x86) from the site of Oracle Corporation and install it. http://www.oracle.com/t echnetwork/java/javase/ downloads/index.html
Configuring the DHCP Server	When you operate with a DHCP server	See Section 1.2.2, "Setting Up the DHCP Server" in this manual.
Set the Package Web Server	When you manage packages collectively over multiple Management Servers	See Appendix B, "Configuring the Package Web Server" in this manual.
Setting Up Multicast Protocol	In the following case:  ·When multicast protocol is used and  ·When managed machines on multiple subnets are managed beyond the router and software routing is done. (*1)	See "Regarding managing managed machines when the Management Server exceeds the network segment" in Section 2.2.1, "Regarding the Network Environment" in First Step Guide.

Setting Up the DHCP Relay Agent	·When you operate with a DHCP server and     ·When managed machines on multiple subnets are managed beyond the router and software-routed is done. (*1)	See "Regarding managing managed machines when the Management Server exceeds the network segment" in Section 2.2.1, "Regarding the Network Environment" in First Step Guide.
Configuring NFS Server	When you perform the OS clear installation (Linux) function	See Appendix C, "Configuring NFS Server" in this manual.

<sup>\*1</sup> 

About setup when routing is performed using hardware devices (routers or switches), see the manuals of the respective devices.

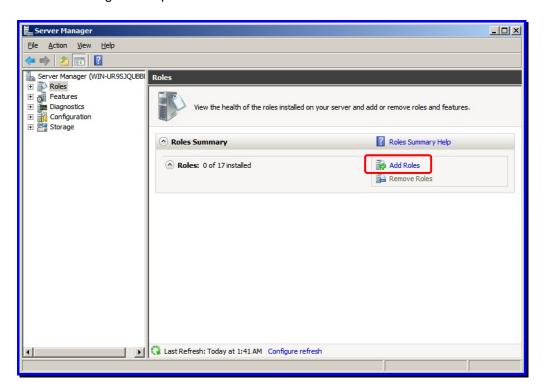
### 1.2.1. Installing Internet Information Services (IIS)

The installation procedure of IIS7.0 (Windows Server 2008) and IIS7.5 (Windows Server 2008 R2) is the following.

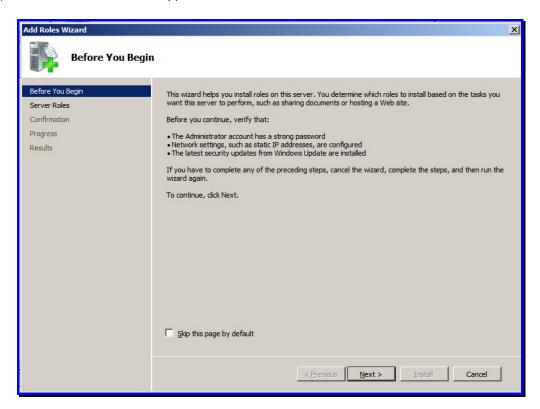


If Web Server (IIS) is already installed, please confirm whether Static Content, ASP.NET and IIS 6 Metabase Compatibility are installed in Select Role Services screen by selecting Add Role Services in Web Server (IIS) from Server Manager of OS. Please install the components that are not installed.

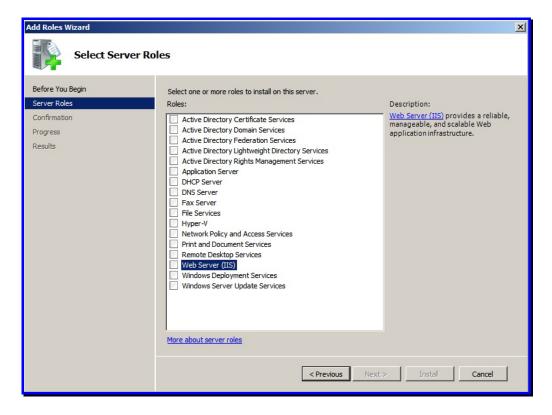
- (1) From the Start menu, select Administrative Tools -> Server Manager.
- (2) The **Server Manager** screen appears. Select **Roles** on the left-hand pane, and then click **Add Roles** on the right-hand pane.



(3) The Add Roles Wizard appears. Click Next.



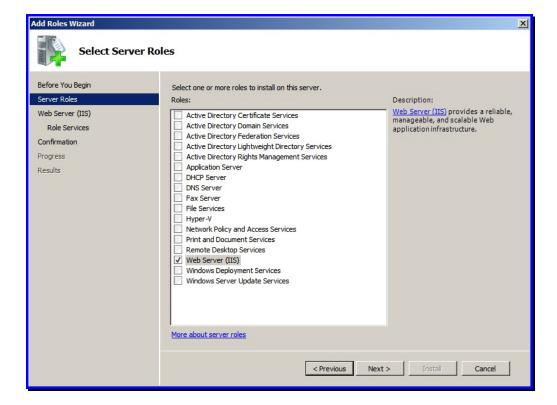
(4) The Select Server Roles screen appears. Select Web Server (IIS).



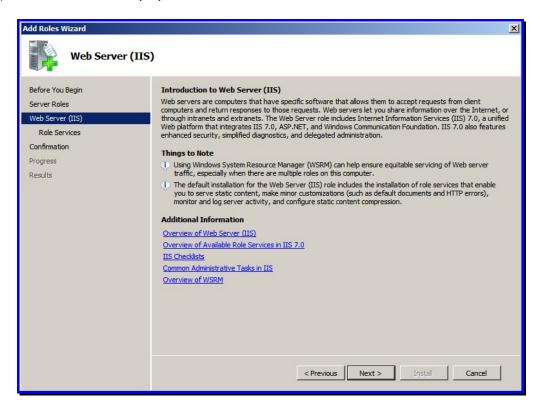
(5) The following screen appears. Click **Add Required Features**.



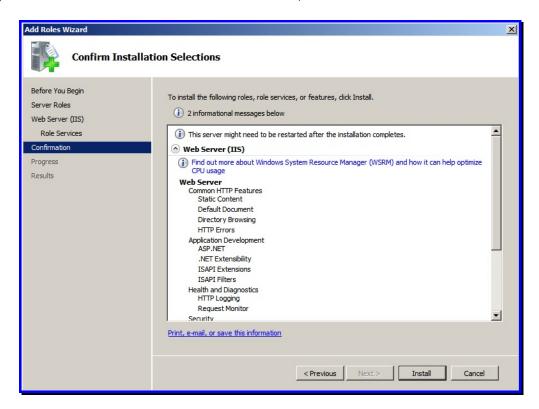
(6) The screen returns to the Select Server Roles screen. Click Next.



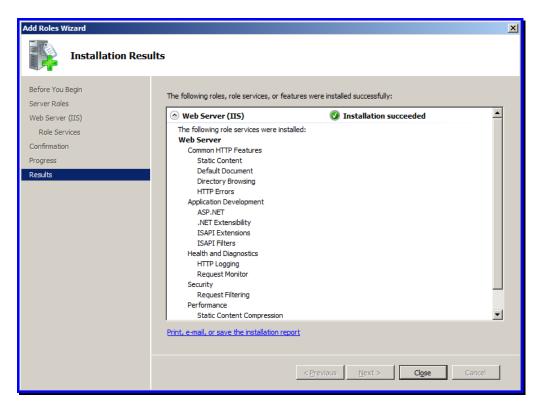
(7) On the Web Server (IIS) screen, click Next.



- (8) On the Select Role Services screen, check Static Content, ASP.NET and IIS6 Metabase Compatibility and click Next.
- (9) On the Confirm Installation Selections screen, click Install.



(10) On the Installation Results screen, check the installation details and click Close.



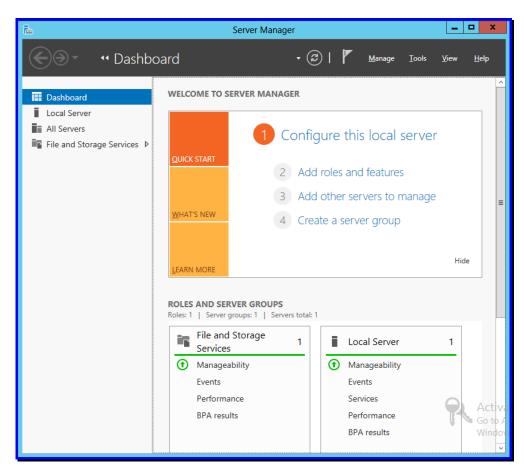
• The installation procedure of IIS8.0(Windows Server 2012) is the following.



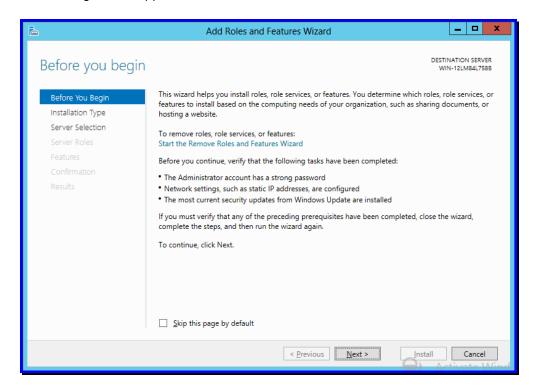
If Web Server (IIS) is already installed, confirm whether Static Content, ASP.NET 4.5, and IIS 6 Metabase Compatibility are installed in Selection Features screen by clicking Add roles and features in Manage menu from Server Manager of OS. Please install the components that are not installed.

(1) Click Server Manager in Windows task bar in Windows desktop.

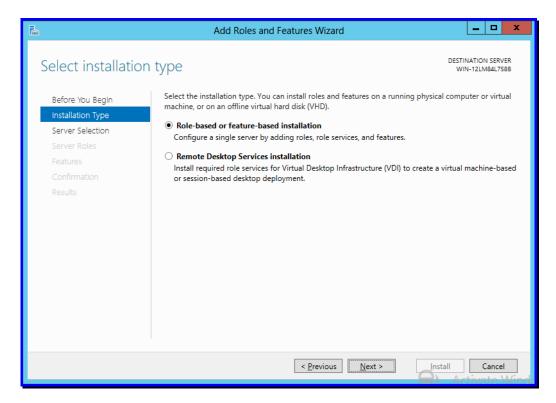
(2) Server Manager screen appears. Click Manage menu -> Add Roles and Features.



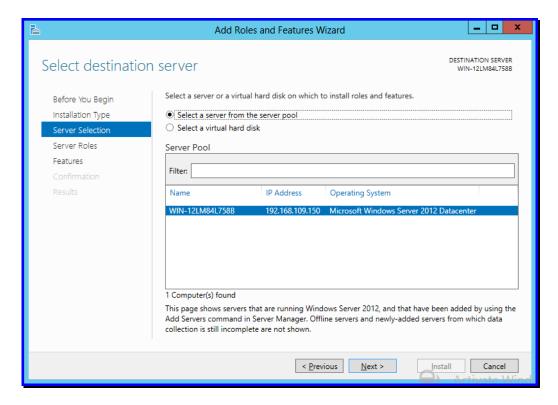
(3) The following screen appears. Click Next.



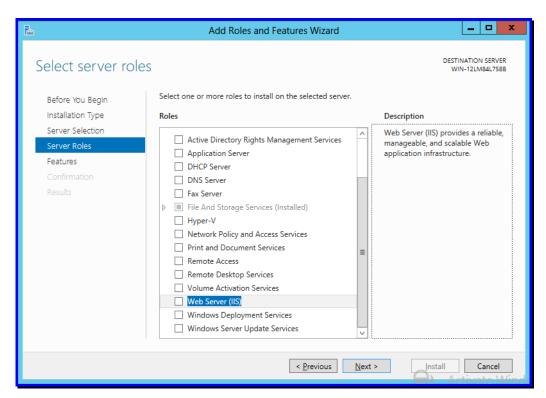
(4) Select installation type screen appears. Select Role-based or feature-based installation and click Next.



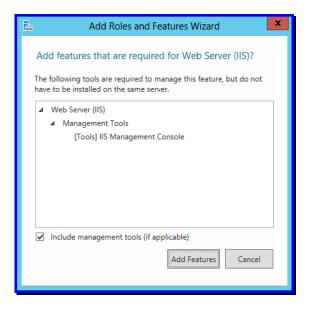
(5) Select destination server screen appears. Select the corresponding machine and click Next.



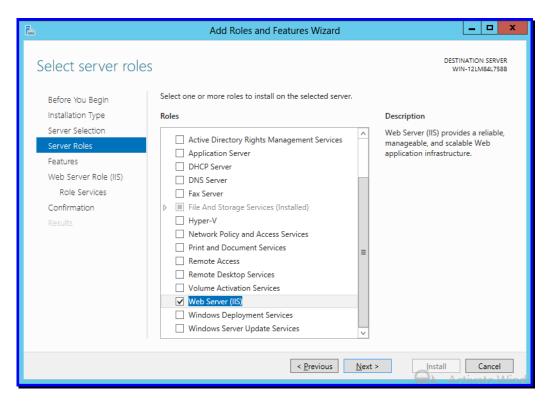
(6) Select server roles screen appears. Select Web Server (IIS).



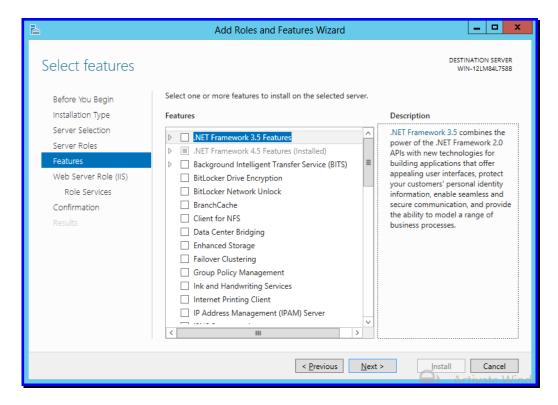
(7) The following screen appears. Click Add Features.



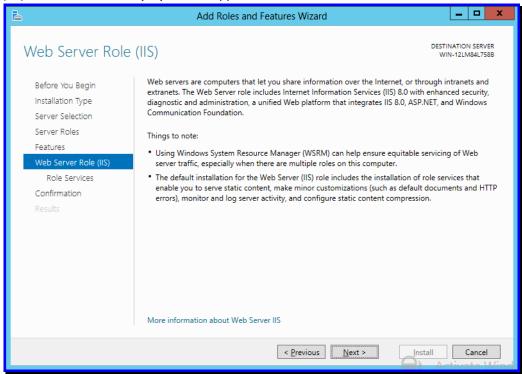
(8) Returns to Select server roles screen. Click Next.



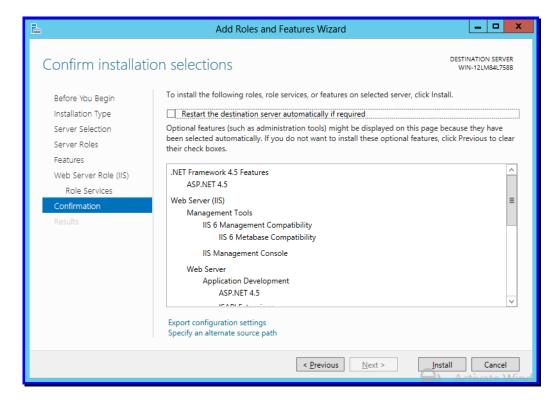
(9) Select features screen appears. Click Next.



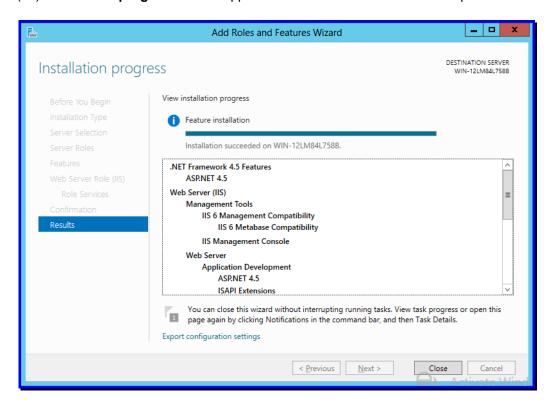
(10) Web Server Role (IIS) screen appears. Click Next.



- (11) In Select role services screen, select Static Content, ASP .NET 4.5, IIS 6 Metabase Compatibility and click Next.
- (12) Confirm installation selections screen appears. Click Install.



(13) Installation progress screen appears. Confirm that installation is completed and click Close.



### 1.2.2. Setting Up the DHCP Server

The following describes how to install a DHCP server.

If a DHCP server is not installed, install the DHCP service following the procedure below.

- For Windows Server 2008
- (1) From the Start menu, select Administrative Tools -> Server Manager.
- (2) The **Server Manager** screen appears. Select **Roles** on the left-hand pane, and then click **Add Roles** on the right-hand pane.
- (3) The Add Roles Wizard appears. Click Next.
- (4) The **Select Server Roles** screen appears. Select **DHCP Server**.
- (5) Select **Network Connection Bindings** and **DHCP Scopes** on the left-hand pane, and set up according to your operating environment.



Prepare IP addresses in an amount equivalent to the number of machines managed by DPM. If machines except than those managed by DPM obtain IP addresses from the DHCP, ensure that there are a sufficient number of IP addresses. Scenarios may not run properly if there are insufficient IP addresses.

- (6) Select Confirmation on the left-hand pane.
- (7) On the Confirm Installation Selections screen, click Install.
- (8) On the **Installation Results** screen, check the installation details and click **Close**.

Installation of the DHCP server is completed on Windows Server 2008.

- For Windows Server 2012
- (1) Click **Server Manager** in Windows task bar in Windows desktop.
- (2) Server Manager screen appears. Click Manage menu -> Add roles and features.
- (3) Before you begin screen appears. Click Next.
- (4) Select installation type screen appears. Select Role-based or feature-based installation and click Next.
- (5) Select destination server screen appears. Select the corresponding machine and click Next.
- (6) Select server roles screen appears. Select DHCP Server.
- (7) Add features that are required for DHCP Server? screen appears. Click Add Features.
- (8) Returns to Select server roles screen. Click Next.
- (9) **Select features** screen appears. Click **Next**.
- (10) **DHCP Server** screen appears. Click **Next**.
- (11) Confirm installation selections screen appears. Click Install.
- (12) **Installation progress** screen appears. Confirm that installation is completed and click **Close**.
- (13) Returns to Server Manager screen. Select Tool menu -> DHCP.
- (14) **DHCP** screen appears. Right-click **IPv4** under the corresponding machine from the tree on the left side of the screen and select **New Scope**.
- (15) **New Scope Wizard** screen appears. Configure following the environment to use.



Prepare IP addresses in an amount equivalent to the number of machines managed by DPM. If machines except those managed by DPM obtain IP addresses from the DHCP, please ensure that there are a sufficient number of IP addresses. Scenarios may not run properly if there are insufficient IP addresses.

(16) If Completing the New Scope Wizard screen appears, click Finish.

Installation of the DHCP server is completed on Windows Server 2012.

Note

If you want to construct the DHCP server using a server except the DHCP server included in Windows OS as standard, note the following:

- You cannot install or use DHCP server software manufactured by a third party on the same machine as DPM Server. When they are installed on the different machine, confirm that DHCP server software leases the IP address correctly for the network boot(PXE boot) in advance.
- When the DHCP server is constructed using Linux, for example, you may need to specify a fixed address in /etc/dhcpd.conf.

A fixed address refers to a mechanism wherein the MAC address of the managed machine and the IP address to be leased are combined and registered in the DHCP server in advance, and the DHCP server leases the fixed IP address in response to an address request from the managed machine.

If there is no description of the fixed address, a response delay from the DHCP server may occur. In that case, the PXE boot (network boot) will fail and DPM may not behave properly due to the affect. For UNIX operating systems except Linux, a fixed address may be similarly required.

The following shows an example of /etc/dhcpd.conf in a case where a fixed address (192.168.0.32) is specified for the MAC address (12:34:56:78:9A:BC) host

```
subnet 192.168.0.0 netmask 255.255.255.0 {
...
host computer-name {
hardware ethernet 12:34:56:78:9A:BC;
fixed-address 192.168.0.32;
}
```

# 2. Installing DPM

This chapter describes how to install DPM by standard or custom installation. End all the running applications, Explorer, and the Web browser.

### 2.1. Installing the DPM Server

DPM Server is the component that is installed on the Management Server. When DPM Server is installed, Image Builder and DPM Command Line are also simultaneously installed.

During DPM Server installation, note the following:

 When "DPM Server" is installed by standard installation, ".NET Framework 4" and "DPM Server" are installed.



- In the case of Windows Server 2012, do not install .NET Framework 4 by the installation media. Click **Add roles and features** in **Manage** menu from **Server Manager** of OS, select .NET Framework 4.5 Feature in **Selection Features** screen and install it. Also, it is not necessary to install .NET Framework 4 by installing .NET Framework 4.5 Feature. Install DPM Server by seeing Section 2.1.2, "Installing the DPM Server by Custom Installation."
- If .NET Framework 4 is already installed, install DPM Server by seeing Section 2.1.2, "Installing the DPM Server by Custom Installation."
- For IIS 7.0 or 7.5, click Add Role Services in Web Server (IIS) from Server Manager of OS, please confirm whether Static Content, ASP.NET and IIS 6 Management Compatibility are installed with Selection Role Service screen. Please install the components that are not installed.
- For IIS 8.0, confirm whether Static Content, ASP.NET 4.5 and IIS 6 Metabase Compatibility are installed in Selection Role Service screen by clicking Add Roles and Features in Manage menu from Server Manager of OS. Please install the components that are not installed.
- When you configure the database on the same machine as DPM Server, if you install DPM Server, SQL Server 2012 SP1 Express and database files will be installed.
  - When you use existing instance as SQL Server instance, the product in the installation media(SQL Server 2012 SP1 Express) will not be installed and the database files with the name "DPM" will be installed on the existing instance. In the environment that that specified instance is not installed, even if SQL Server except the product in the installation media(SQL Server 2012 SP1 Express) is already installed, SQL Server 2012 SP1 Express will be installed newly and the instance will be created.
- When you configure the Database Server, install DPM Server after configuring the Database Server.
  - About configuring the Database Server, see "Configuring the database" in Appendix D, "Configuring Database Server."
- When DPM Server and MasterScope Network Manager are installed on the same machine, it is necessary to set MasterScope Network Manager's Trivial File Transfer Protocol (TFTP) service to cooperate with DPM's TFTP service. Without setting this, MasterScope Network Manager's TFTP service conflicts with DPM's TFTP service, and each TFTP service might not work properly. For details, see Appendix F, "Configuring DPM Server and MasterScope Network Manager on the Same Machine."
- When you use the following functions by Image Builder, install JRE.
  - When you create Linux installation parameter files for OS clear installation
  - When you create Linux disk duplication data files

There is no effect by the order of installing JRE and DPM Server.

When you install DPM Server just after installing JRE, install DPM Server after waiting for few minutes.

 Log on to the machine in which DPM Server is to be installed under Administrator authority, and confirm that the required amount of disk space exists before installation.

Note

■ Confirm that Windows Installer 4.5 or later has been installed.

Windows Installer 4.5 is included in the installation media.

[For Windows Server 2008 (x64)]

<Installation media>:\dotNet Framework40\Windows6.0-KB942288-v2-x64.msu
[For Windows Server 2008 (x86)]

< Installation media>:\dotNet Framework40\Windows6.0-KB942288-v2-x86.msu [For Windows Server 2008 R2/Windows Server 2012]

Installed by default. Installation is not required.

- Install and set up IIS in advance. For the installation and setup method, see Section 1.2.1, "Installing Internet Information Services (IIS)."
- When you install DPM Server, Microsoft SQL Server 2012 Native Client is also installed. (If Microsoft SQL Server 2012 Native Client is already installed, SQL Native Client is not overwritten).
- Confirm that a machine with DPM Server installed does not exist within the network to be managed by DPM. Existence of such a machine within the same network, even if the versions are different, results in malfunction. Confirm that management is not performed from a DPM Server located on a network of a different network segment.



It is recommended that you set up the DHCP server in advance before DPM Server installation.



If you want to use an existing .NET Framework, see Section 2.1.2, "Installing the DPM Server by Custom Installation."

- The ODBC data source entitled "DPM" is added to the system where DPM Server is to be installed. Do not install DPM Server on a system where the data source entitled "DPM" is already installed by an application except DPM.
- For details of the settings during installation, see Section 2.7, "Base Information about the Management Server" in *Reference Guide*.



The port that will be used in DPM Server can be customized in advance when installation is executed for the first time.

About the default port of DPM Server, see Appendix D, "Network Port and Protocol List" in *Reference Guide*. About the method of customizing port to use, see Section 9.5, "Procedure to Change the Port Used by DPM" in *Reference Guide*.

- Depending on the machine model of the managed machine, you may need to apply the module for the machine model.
  - Contact your sales or support representative about whether you need to apply such a module. If it is necessary to apply the module, after installing DPM Server, apply the module following the procedure provided with the module for the machine model.
- When you back up the data of DPM Server after you started operating DPM, see Section 9.4, "Data Backup Plan" in *Reference Guide*.
  - Note the items set when you install DPM Server. They are necessary for recovering the data.

### 2.1.1. Installing the DPM Server by Standard Installation

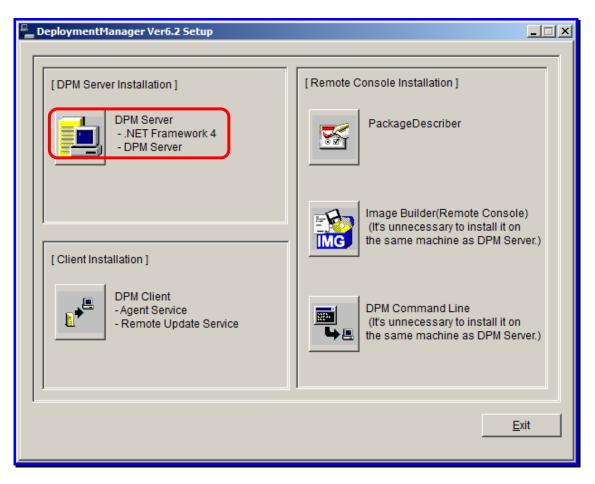
The following describes how to install DPM Server by standard installation.

Log on to the machine where DPM Server is to be installed using a user with Administrator authority.



In the case of Windows Server 2012, be sure to log on with Administrator user and install.

(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **DPM Server**.



(2) The **Selection of Installation Method** screen appears. Select **Standard Installation(Recommended)** and click **OK**.

Clicking Cancel returns the screen to the **DeploymentManager Setup** screen.

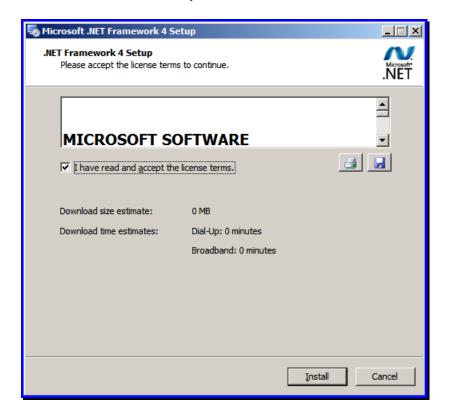
Tips

In an environment in which .NET Framework is already installed, select **Custom Installation**, clear .**NET Framework 4**, and click **OK**.



(3) Wait until the installation of .NET Framework is completed.

Next, the Microsoft .NET Framework 4 Setup screen appears. Check the license contents, select I have read and accept the license terms. and click Install.



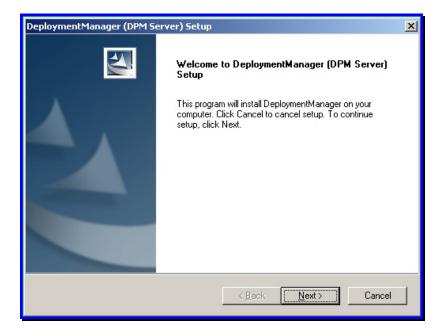
(4) After the installation is completed, the following screen appears. Click **Finish**.



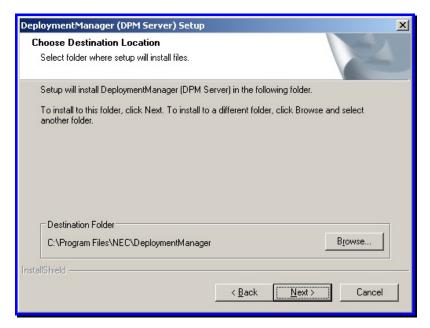
Note

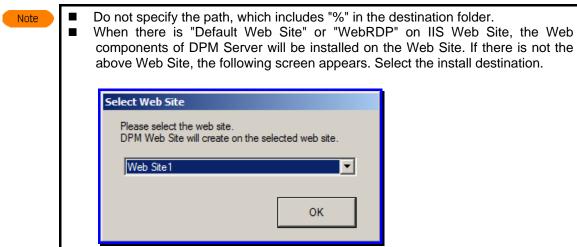
When the screen, which prompts you to restart the machine, appears after clicking the **Finish** button, restart the machine following the instruction on the screen. When you restart the machine, go to (5) after the following procedure.

- 1) Go to the screen of (2) again. Select **Standard Installation** and click **OK**.
- 2) .NET Framework 4 Maintenance screen appears. By clicking Cancel, go to (5).
- (5) The Welcome to DeploymentManager Setup (DPM Server) wizard begins. Click Next.



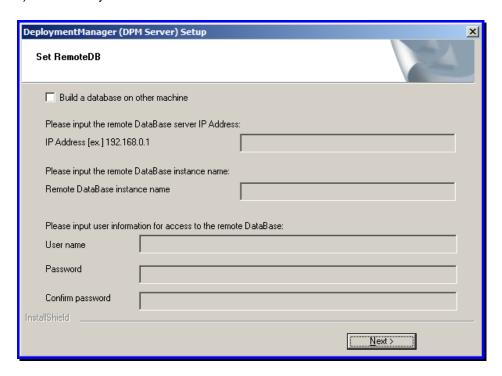
(6) The Choose Destination Location screen appears. Specify the folder for installation and click Next.



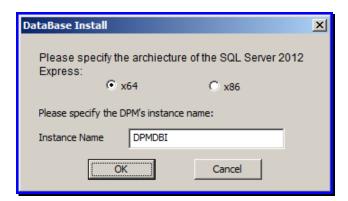


- (7) The **Set RemoteDB** screen appears. Set each item, following the database environment to use.
  - When you configure the database(installing SQL Server 2012 SP1 Express) on the same machine as DPM Server

1) Check that you clear **Build a database on other machine** and click **Next**.



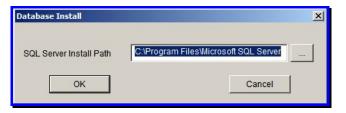
2) The **DataBase Install** screen appears. Select the architecture type of SQL Server 2012 SP1 Express to install(Only in the case of x64 OS) and specify the instance name. And click **OK**.



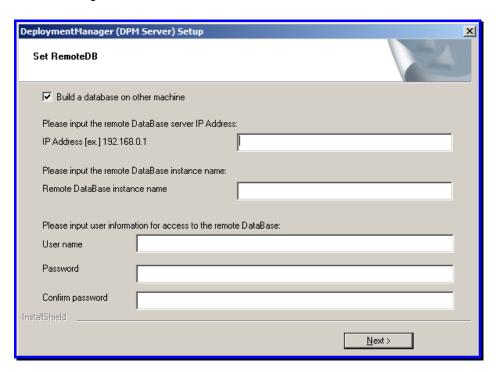
Note

About specifying the instance name, be careful about the following.

- You cannot specify the reserved keyword of SQL Server.("Default" and so on)
   When you specify the reserved keyword, the setup error occurs.
- · Upper cases and lower cases are not distinguished.
- 1-16Byte characters can be entered.
- The allowed characters are single-byte alphanumeric characters.
- 3) The Database Install screen appears. Specify the installation folder, and click OK.



When you configure the Database Server
 After selecting Build a database on other machine, set each item and click Next.

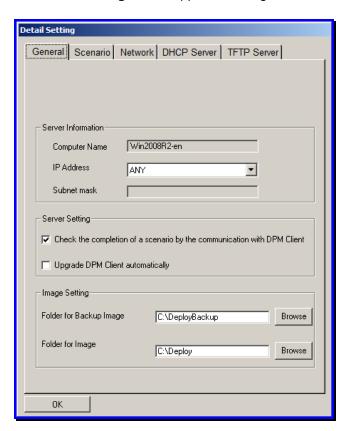


Note

About the instance name, user name, and password, set the same values as the values in Appendix D, "Configure Database Server."

When you set the different values, installation of DPM Server is completed. However, DPM Server does not work properly. In that case, uninstall DPM Server and install it again.

(8) The **Detail Setting** screen appears. Configure the **General** tab.



■ Specify the IP Address that will be used by the server in the IP address area of the Server Information box. This is used for the connection with DPM Client and Image Builder (Remote Console). When using the fixed IP address, specify IP address from the list box. (IP addresses, which are set in all LAN boards on the Management Server, are displayed in the list box.)

Select ANY when the IP address to use for connections is arbitrary.



- When a value except ANY is selected as the **IP Address** and multiple IP addresses are assigned to a single LAN board, specify the first IP address that appears on the OS. The DPM may not operate correctly if another IP address is configured.
- When ANY is selected as the **IP Address** and multicast distribution is specified in the remote update scenario, you need to connect managed machines to under a single LAN board of the Management Server.
- When multicast distribution is specified in the restore scenario, specify a value except ANY (an IP address set for the used LAN board) as the IP Address.
- Under Check the completion of a scenario by the communication with DPM Client, select the method for determining scenario completion. Select it when you want to monitor scenario completion in real-time.

In the case of SSC product, select it necessarily.

When it is checked, the scenario completion is recognized at the timing when other processing can be done next.

(For example, it is the timing when the managed machine is restarted and the starting processing of OS and DPM Client is completed after the instruction of the restart by DPM Server.)

· When you select it:

The scenario execution is completed at the timing of the communication with DPM Client. Example)

Execution of a backup scenario

The completion of backup processing

PXE boot

OS start

Communication with DPM Client (At this timing, the scenario completion is recognized.)

• When you do not select it:

DPM Server does not wait for the communication with DPM Client. At the timing when DPM Server executes the last processing/instruction or PXE boot is executed on the managed machine(only when DHCP server is used), the scenario is completed. Example)

Execution of a backup scenario

The completion of backup processing

PXE boot (At this timing, the scenario completion is recognized.)

Note

If you select the **Check the completion of a scenario by the communication with DPM Client** check box, confirm the items below. If these points are not met, the scenario will not be completed.

- Be sure to install DPM Client on the managed machine.
- The network settings are set so that the managed machine and DPM Server can communicate when the scenario is completed.
- In **Upgrade DPM Client automatically**, select whether you want to upgrade DPM Client automatically.

If you want to upgrade DPM Client automatically, select the check box.

In the case of SSC product, clear it necessarily.

For automatic upgrading, see Section 3.3.1, "Automatically Upgrading the DPM Client."

- If you want to change the backup image storage folder, click **Browse** next to **Folder for Backup Image** in the **Image setting** group box, and select the folder. The default is C:\DeployBackup.
- If you want to change the image storage folder, click **Browse** next to **Folder for Image** in the **Image Setting** group box, and select the folder. For the "**Folder for Image**," specify a folder name that stores service packs, applications, and the OS where OS clear installation is to be performed with DPM. The default is <**DPM Server installation drive**>:\Deploy.

Note

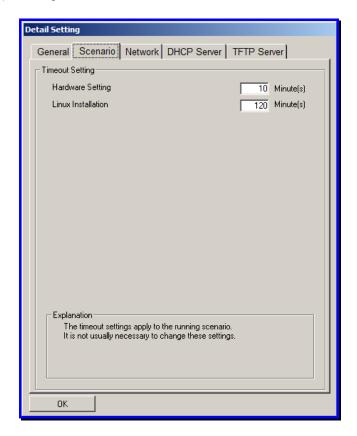
- If you change the **Folder for Backup Image**, change the image file location of already created backup and restore scenarios and the following scenarios created by default:
  - System Backup
  - System\_Restore\_Unicast
- Folders such as the following cannot be specified as the Folder for Backup Image or Folder for Image location:
  - A folder that serves as both the Folder for Backup Image and Folder for Image
  - The location of Folder for Backup Image or Folder for Image that is under the other folder (For example: The Folder for Backup Image cannot be specified as a subfolder under the Folder for Image).
  - The Windows system folder
  - A folder used by another application
  - A folder directly under the drive Example) "D:\"
  - A network drive
- Do not change both the Folder for Backup Image and Folder for Image

following a procedure except that written in this manual (such as by editing or deleting the folder directly from Explorer). Be sure to change the folder from here.

- Assign access authorization to the Folder for Backup Image and Folder for Image so that the users who perform DPM operations and the accounts employed by the various services that start with the name "DeploymentManager" on DPM Server [preset value: local system accounts (SYSTEM)] can access the folders with full control.
- Be sure to secure enough free space for both the Folder for Backup Image and Folder for Image.



- For SSC product, the DPM license is included with the SSC product. The number of licenses is not displayed.
- You can change the settings on the Web Console after DPM Server installation as well.
- (9) Configure the Scenario tab.

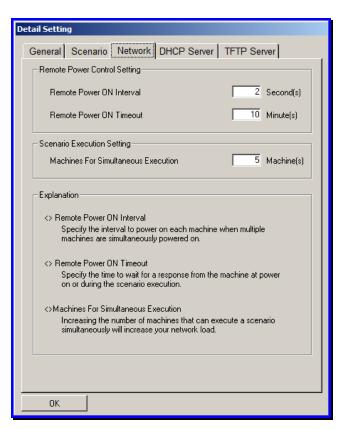


Set the scenario timeout times. Usually the settings do not need to be changed.



- The scenario timeout time is the timeout time when executing a scenario. If a scenario cannot be completed within the set time for each item, a scenario execution error occurs.
- You can change the settings on the Web Console even after DPM Server is installed.

(10) Configure the **Network** tab.



■ This tab allows you to set remote power control settings and set scenario execution settings. Change the settings as necessary.



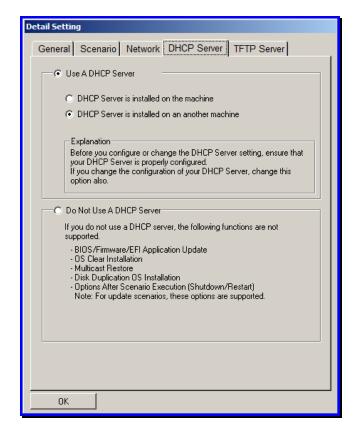
■ If scenario is executed on more machines than the number specified in **Machines for Simultaneous Execution**, the scenario will be executed up to the specified number. The action of the remaining machines will differ according to the type of scenario as shown in the table below. At the timing when the scenario is completed on an executing machine, the scenarios will be sequentially executed on the remaining machines.

Scenario	Remaining Machines for Simultaneous Execution
remote update(multicast distribution)	scenario execution error
remote update(unicast distribution)	standby
backup/restore	standby

■ When the power of a managed machine that is waiting for scenario execution is manually turned on, the scenario is executed, exceeding the number specified under **Machines for Simultaneous Execution**.



- Remote Power ON Interval is the remote power activation interval when multiple machines are turned on simultaneously.
- Remote Power ON Timeout is the amount of time the system should wait for a response from a machine at power on or during scenario execution. If a response is not received within the set time, a Remote Power ON error occurs. The set default value is 10 minutes. Please increase this value if there is a power on, but a power on error occurs. If you specify "0", the system waits for a response from the managed machine. (A Remote Power ON timeout error does not occur).
- Machines for Simultaneous Execution is used to specify the number of machines that run scenarios simultaneously. The number of devices available for concurrent control has a maximum value of 1000 devices, but the load on the network will increase as the number of scenarios concurrently running increases. The set default value is "5". If you want to run more than 5 simultaneously, change the setting.
- You can change the settings on the Web Console after DPM Server installation as well.
- (11) Configure the DHCP Server tab and click OK.



■ Confirm the DHCP server installation location. If you are using the DHCP service installed on DPM Server, select the **DHCP Server is installed on the machine** (selected by default). If you want to use a DHCP server on a different machine, select **DHCP Server is installed on an another machine**.

If you do not want to install a DHCP server, select Do Not Use A DHCP Server.

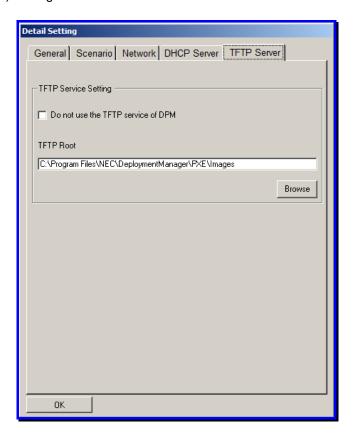


If you want to use a DHCP server constructed on DPM Server, do not install another DHCP server on the same network. If you want to use a DHCP server constructed on another machine, you can have multiple DHCP servers exist on the same network.



You can change the settings on the Web Console after DPM Server installation as well.

(12) Configure the **TFTP Server** tab and click **OK**.



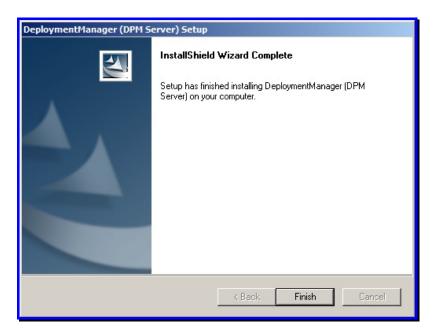
- Configure the TFTP service.

  If DPM TFTP service is not used, select **Do not use the TFTP service of DPM**.
- When you change TFTP root, click **Browse** next to **TFTP Root** and select the folder. The default is <**DPM Server installation folder**>\PXE\Images.



- You cannot change the settings on this tab from the Web Console after DPM Server installation.
- About TFTP Root, be careful about the following.
  - When Do not use the TFTP service of DPM is selected, it is recommended that you set the folder except DPM Server installation folder in TFTP root.
     When you set DPM Server installation folder in TFTP root, the folder specified as TFTP root is deleted when you uninstall DPM Server. The folder cannot be referenced from TFTP service except DPM.
  - You cannot specify the following folders.
    - Folders under < **DPM Server installation folder**>\PXE\Images
    - Windows system folder
    - Directly under the drive Example) D:\

- Network drive
- For the folder which is specified as TFTP root, keep enough disk space.
- (13) The InstallShield Wizard Complete screen appears. Click Finish.





- After installation is completed, **DeploymentManager** is registered in the **Start** menu.
- When either of the services below is running, the port and program required for DPM Server will open automatically. (For details on the opened port and program, see Appendix D, "Network Port and Protocol List" in *Reference Guide*.)
  - Windows Firewall/Internet Connection Sharing(ICS)
  - Windows Firewall

The standard installation of DPM Server is completed.

#### 2.1.2. Installing the DPM Server by Custom Installation

The following describes how to custom-install DPM Server.



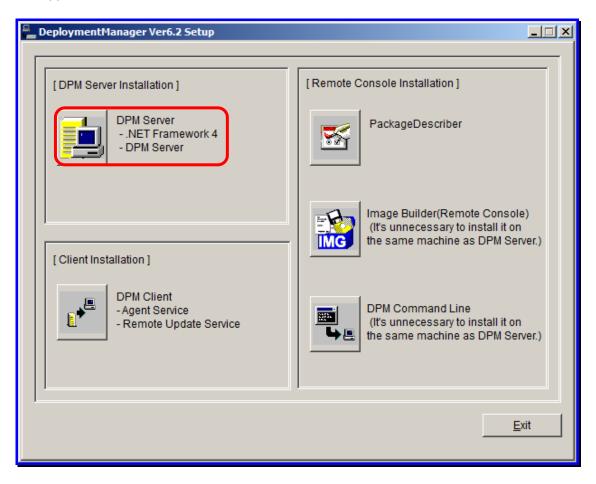
If .NET Framework 4 is already installed, install required components by custom installation.

Log on to the machine where DPM Server is to be installed using a user with Administrator authority.



In the case of Windows Server 2012, be sure to log on with Administrator user and install.

(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **DPM Server**.



(2) The Selection of Installation Method screen appears. Select Custom Installation and then check the items to install and click OK. Clicking Cancel returns the screen to the DeploymentManager Setup screen.



The messages displayed after this point differ according to the items you have selected. (The checked items will be installed in their listed order). For details, see Section 2.1.1, "Installing the DPM Server by Standard Installation."

The custom installation of DPM Server is completed.

## 2.2. Installing the DPM Client

DPM Client is the component installed on managed machines.

The installation method varies according to the OS of the managed machine. If you are using Windows, see Section 2.2.1, "Installing the Windows (x86/x64) Version." If you are using Linux, see Section 2.2.2, "Installing the Linux (x86/x64) Version."

During DPM Client installation, note the following:

- For information on operating systems that permit installation, see Section 3.9, "Managed Machines (Physical Machines)" in *First Step Guide*.
- Log on to the machine in which DPM Client is to be installed under Administrator authority, and confirm that the required disk space exists before installation.
- On machines that Linux OS is installed by clear installation, DPM Client was installed simultaneously with OS installation. There is no need to install it separately.



Always use a DPM Client that is of the same version/revision as DPM Server. If you are using an older version/revision of a DPM Client, see Section 3.3, "Upgrading the DPM Client" and upgrade the client.

Note

Be sure to install DPM Client if you had selected Check the completion of a scenario by the communication with DPM Client under Management view -> DPM Server -> Detail Setting -> General tab. If you do not install it, the completion of the scenario cannot be recognized and a scenario error occurs.



If it is difficult to install DPM Client on managed machines, you can also operate DPM without installing DPM Client. (Some functions cannot be used.)

See Appendix C, "For Customers Who Cannot Easily Install DPM Client" in *First Step Guide* for details.

#### 2.2.1. Installing the Windows (x86/x64) Version

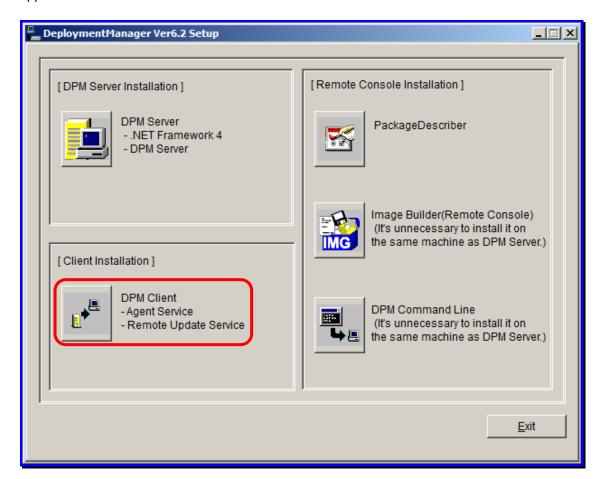
This section describes how to install DPM Client (Windows).

Log on to the machine where DPM Client is to be installed using a user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **DPM Client**.



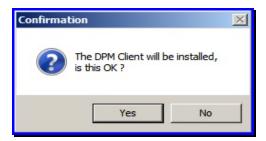
Tips

If you want to install DPM Client on Windows Server 2008 (Server Core installation) or Windows Server 2012 (Server Core installation), execute the following file to display the **DeploymentManager Setup** screen.

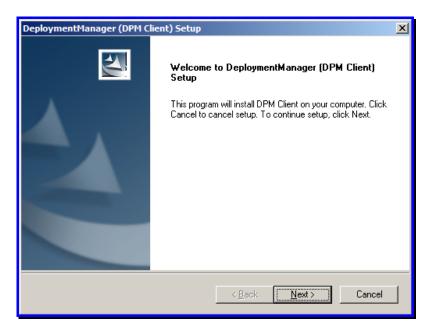
·For products for SSC: < Installation media >: \DPM\Launch.exe

·For DPM unbundled product: < Installation media>:\Launch.exe

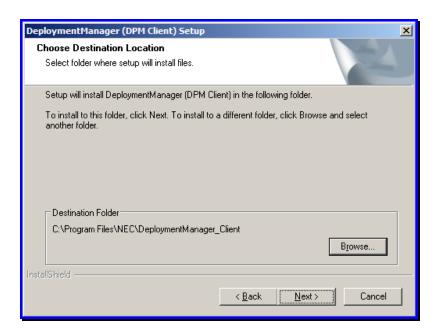
(2) The Confirmation screen appears. Click Yes.



(3) The Welcome to DeploymentManager (DPM Client) Setup wizard begins. Click Next.



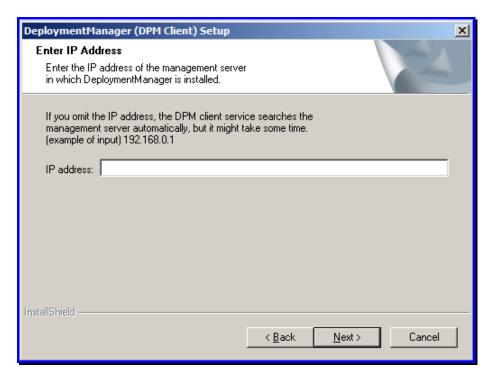
(4) The **Choose Destination Location** screen appears. Specify the installation folder and click **Next**.



Note

About the installation folder, be careful about the following.

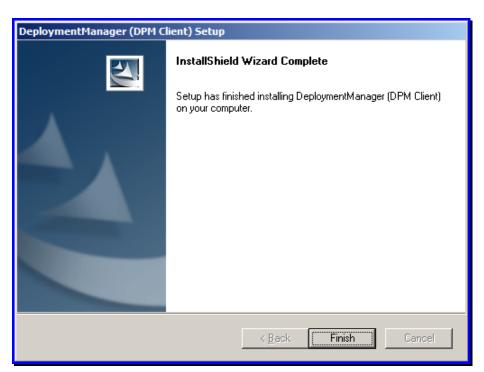
- Do not specify the path, which includes "%".
- When you perform OS installation by disk duplication, install DPM Client on the drive which is not affected by reassigning the drive letter. (C drive is recommended.)
- (5) The **Enter IP Address** screen appears. Enter the IP address of the Management Server where DPM Server was installed, and click **Next**. If the IP address is omitted, DPM Client searches the Management Server automatically. It may take some time to search.



Note

- DPM Client has the information of the IP address of the Management Server and the port used by DPM Server and DPM Client. When DPM Client cannot connect to DPM Server by the IP address and the port at the timing that the service of DPM Client is started, it is judged as that the IP address of the Management Server has changed or the port used by DPM Server has changed and DPM Client searches the Management Server. The result of the search is saved on the managed machine.
  - The part of the communication sequence of DHCP is used to search the Management Server. DPM Client uses the port of UDP:68 to receive the data from the Management Server. When DPM Client cannot bind the network by the port of UDP:68, it fails to search the Management Server.
  - DHCP client of OS standard uses the port of UDP:68. It is already confirmed that there is no problem.
- When DPM Client searches the Management Server in the environment that there are multiple Management Servers, DPM Client obtains the IP address of the Management Server, which responded first.

(6) The **InstallShield Wizard Complete** screen appears. Click **Finish**.



Tips

- If either the Windows Firewall Service or Windows Firewall/Internet Connection Sharing (ICS) Service is started, the port and program required by DPM Client will automatically be opened.

Protocol	Port Number or Program
ICMP	8 (Echo incoming)
TCP	DepAgent.exe
UDP	DepAgent.exe
TCP	rupdsvc.exe
UDP	rupdsvc.exe

- After installing DPM Client in Windows Server 2008 (excluding Server Core installation)/Windows Server 2012 (excluding Server Core installation)/Windows Vista/Windows 7/Windows 8, the following message may be outputted to the event log. This message, however, is unproblematic in terms of operation.
  - The DeploymentManager Agent service is marked as an interactive service. However, the system is configured not to allow interactive services. Therefore, this service may not function properly.
  - The DeploymentManager Remote Update Service Client service is marked as an interactive service. However, the system is configured not to allow interactive services. Therefore, this service may not function properly.

The installation of DPM Client (Windows) is completed.

#### 2.2.2. Installing the Linux (x86/x64) Version

This section describes how to install DPM Client (Linux).



- The installation folder of DPM Client(Linux) is /opt/dpmclient(Fixed).
- The following libraries are needed for DPM Client to run.
  - · libpthread.so.0
  - · libc.so.\*
  - Id-linux.so.2
  - \* Indicates a numeric value.

In addition to the above, if OS is Red Hat Enterprise Linux 6(x64) or later and ESX(x64), the following packages need to be installed. However, these need not be installed if Compatibility libraries (libraries to operate x86 modules on an x64 OS environment) are installed.

- glibc-\*-\*.i686.rpm
- \* Indicates a numeric value. (Version/release number)

Be careful if the ignore package dependencies option (--nodeps) is set at the time of installation, because the necessary packages might not be installed.

- On Red Hat Enterprise Linux 6 or later, the following libraries are required to execute OS installation by disk duplication.
  - · libc.so.\*
  - Id-linux.so.\*
  - libcrypt.so.\*
  - libfreebl3.so
  - \* Indicates a numeric value.

In addition to the above, the following packages are required if the managed machine is x64. However, these need not be installed if Compatibility libraries (libraries to operate x86 modules on an x64 OS environment) are installed.

- glibc-\*-\*.i686.rpm
- nss-softokn-freebl-\*-\*.i686.rpm
- \* indicates a numeric value. (Version/release number)

Be careful if the ignore package dependencies option (--nodeps) is set at the time of installation, because the necessary packages might not be installed.

- The following libraries are required for a managed machine that is x64 to perform a remote update.
  - /lib/libgcc\_s.so.1

This library is separately required even if a library with the same name exists under "/lib/x64". Please install the following rpm package for the libraries.

- libgcc-3.4.5-2.i386.rpm
- In order to install DPM Client on a managed machine that already has Linux OS installed, please open the following ports that DPM Client will use.

Protocol	Port Number
UDP	68
TCP	26509
TCP	26510
TCP	26520
UDP	26529

Tips

Check the library, which is already installed by executing the following command. If you execute the following command, the library information is displayed. find / -name "*library name*"

#### Example)

find / -name libpthread.so.0 or find / -name libpthread\* (\* indicates the wildcard.)

In the case of the above command, the following information means that the library is already installed.

/lib/libpthread.so.0

- (1) Using a root account, log in to the machine on which DPM Client is to be installed.
- (2) Insert the installation media into the DVD drive.
- (3) Mount the installation media. # mount < DVD drive to mount>

For more information about using the mount command, see the manual of used OS.

(4) Enter the following command to change the current directory.



- For SSC product: # cd /mnt/dvd/DPM/Linux/ia32/bin/agent
- For DPM unbundled product: # cd /mnt/dvd/Linux/ia32/bin/agent
- (5) Execute depinst.sh. #./depinst.sh
  - Tips

Depending on the execution environment, you may not have the authority to run depinst.sh on the installation media.

In this case, copy DPM Client module in the Linux directory on the installation media to the correct directory on the hard disk, then run a chmod command like in the example below to grant authority for all of the files and then run depinst.sh.

#### Example)

# cd /mnt/copy destination directory/agent # chmod 755 \*

- \*The save location for DPM Client installer is as below.
  - For SSC product: < Installation media>:/DPM/Linux/ia32/bin/agent
  - For DPM unbundled product: < Installation media>:/Linux/ia32/bin/agent
- (6) Entering the IP address of the Management Server is requested. Enter the value and press the Enter key.

If IP address is omitted, DPM Client searches the Management Server automatically after the completion of the installation. It may take some time to search.

Enter the IP address of the management server.

(If you omit the IP address, DPM Client service searches the management server automatically, but it might take some time.)

>

Note

■ DPM Client has the information of the IP address of the Management Server and the port used by DPM Server and DPM Client. When DPM Client cannot connect to DPM Server by the IP address and the port at the timing that the service of DPM Client is started, it is judged as that the IP address of the Management Server has changed or the port used by DPM Server has changed and DPM Client searches the Management Server. The result of the search is saved on the managed machine.

The part of the communication sequence of DHCP is used to search the Management Server. DPM Client uses the port of UDP:68 to receive the data from the Management Server. When DPM Client cannot bind the network by the port of UDP:68, it fails to search the Management Server.

DHCP client of OS standard uses the port of UDP:68. It is already confirmed that there is no problem except dhcpcd of SUSE Linux Enterprise 10. To use the function of searching the Management Server in SUSE Linux Enterprise 10, it is necessary to start DPM Client with the status that dhcpcd is stopped. When performing OS installation by disk duplication in SUSE Linux Enterprise 10, dhcpcd is necessary. Therefore, be sure to specify the IP address of the Management Server not to search the server. In the case except OS installation by disk duplication, if the managed machine does not need dhcpcd, stop dhcpcd. If dhcpcd is necessary, you cannot use the function of searching the Management Server.

■ When DPM Client searches the Management Server in the environment that there are multiple Management Servers, DPM Client obtains the IP address of the Management Server, which responded first.

The installation of DPM Client (Linux) is completed.

Note

If unzip is not installed, the following message appears on the console. Please install unzip.

The unzip command is required in order to support remote update. Please install a unzip package.

The unzip package is attached to installation CD of Linux OS. Installation of client service was completed.

Tips

- You do not need to restart the system.
- If Linux is running on an X window system, when DPM Client (Linux) is installed, the console automatically opens at log-in in order to display messages of shutdown from DPM Server or the remote updates. If you exit the console, you cannot see the messages. If you accidently exit the console, open the console again.

Note that when the system is running in txt mode, these messages are outputted to the active screen. txt mode will not affect DPM operation.

- When you install DPM Client, the following message may be displayed:

Warning: This program is a suid-root program or is being run by the root user. The full text of the error or warning message cannot be safely formatted in this environment. You may get a more descriptive message by running the program as a non-root user or by removing the suid bit on the executable.

/usr/X11R6/bin/xterm Xt error: Can't open display:%s

This message appears under one of the following conditions:

- DPM Client was installed without X server installed on the managed machine.
- X server is installed on the managed machine, but was not running when you installed DPM Client.
- You installed DPM Client after logging into the managed machine using a root user account from telnet.

This occurs because DPM Client related messages cannot be displayed. There

is no impact on actual operation.

- With SUSE Linux Enterprise, the console for displaying messages outputted by the Linux agent client service does not automatically open at X-Window startup.
   If you need to open the console, edit the X-Window startup script following the procedure below:
  - 1) Open the /etc/X11/xinit/xinitrc file using an editor such as vi.
  - 2) Insert the following lines under the line **#Add your own lines here . . .**: \* # Console for client service
    - if [ -x /etc/X11/xinit/xdpmmsg.sh ]; then
       /etc/X11/xinit/xdpmmsg.sh

fi

- 3) Save the file and close the editor.
- 4) Restart the machine or X-Window.
  - \*If the line **#Add your own lines here . . .** does not exist, insert the line before the **exec \$WINDOWSMANAGER** line.

# 2.3. Installing Image Builder (Remote Console)

Image Builder is a tool for creating package, disk duplication data files and so on and registering the created files to the Management Server.

Image Builder is simultaneously installed when you install DPM Server, and therefore does not need to be separately installed when used on the same machine as DPM Server.

Image Builder installation is required when used on a machine except DPM Server machine. In this case, Image Builder is referred to as Image Builder (Remote Console).

Note the following precautions when installing Image Builder (Remote Console):

- About the supported OS, see Section 3.5, "Image Builder(Remote Console)" in *First Step Guide*.
- Confirm that the disk space required to install Image Builder (Remote Console) is left.
- When you use the following functions, install JRE.
  - · When you create Linux installation parameter files for OS clear installation
  - When you create Linux disk duplication data files for OS installation by disk duplication There is no effect by the order of installing JRE and Image Builder (Remote Console). When you install Image Builder (Remote Console) just after installing JRE, install Image Builder (Remote Console) after waiting for few minutes.

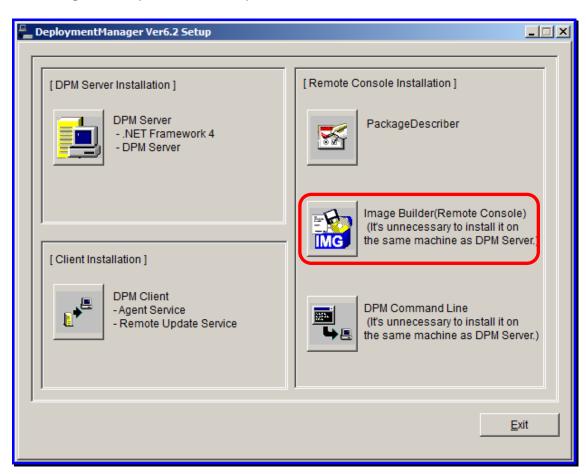
The following describes how to install Image Builder (Remote Console).

Log on to the machine where Image Builder (Remote Console) is to be installed using a user with Administrator authority.

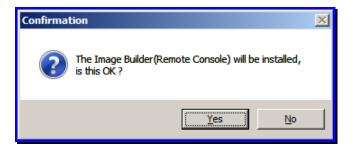


In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

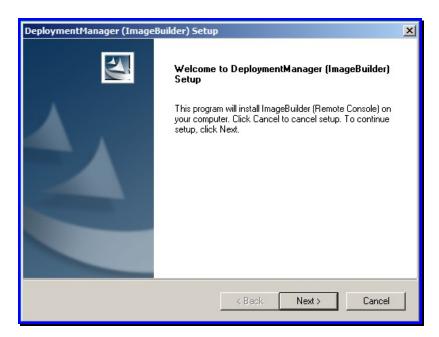
(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **Image Builder(Remote Console)**.



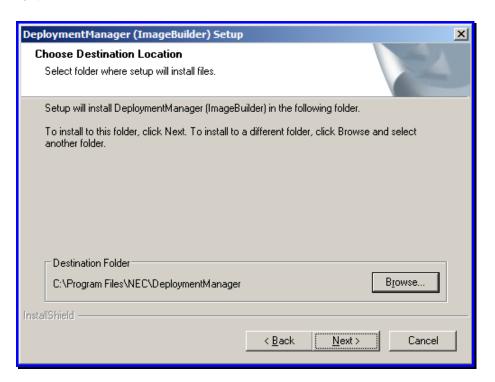
(2) The Confirmation screen appears. Click Yes.



(3) The Welcome to DeploymentManager (ImageBuilder) Setup wizard begins. Click Next.



(4) The Choose Destination Location screen appears. Specify the folder for installation and click Next.



(5) The InstallShield Wizard Complete screen appears. Click Finish.



Tips

After the installation is completed, **DeploymentManager** is registered in the **Start** menu.

The installation of Image Builder (Remote Console) is completed.

# 2.4. Installing DPM Command Line

DPM Command Line is a command line interface used to execute processing on managed machines and check the execution status.

DPM Command Line is simultaneously installed when you install DPM Server, and therefore does not need to be separately installed when used on the same machine as DPM Server. Installation of DPM Command Line is required when used on a machine except DPM Server machine.

During DPM Command Line installation, note the following:

- For information on operating systems that permit installation, see Section 3.6, "DPM Command Line" in *First Step Guide*.
- Confirm that the disk space required to install DPM Command Line exists.

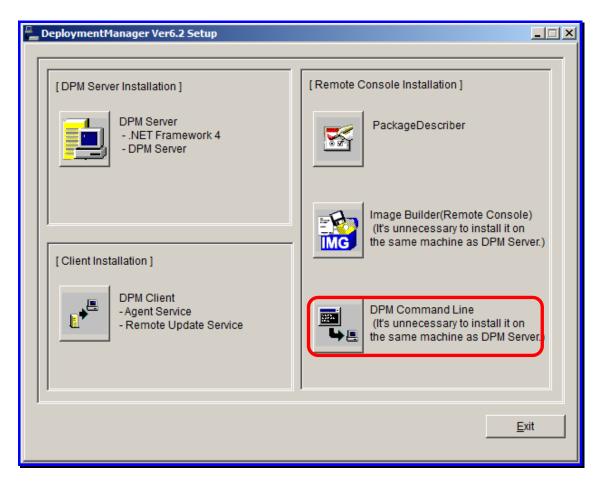
The following describes how to install DPM Command Line.

Log on to the machine where DPM Command Line is to be installed using a user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

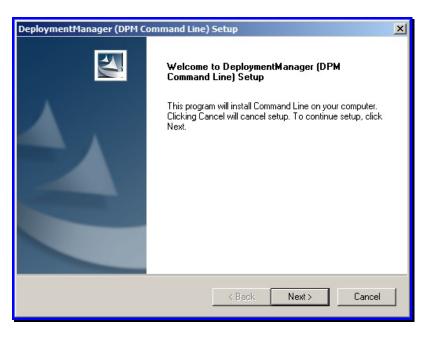
(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **DPM Command Line**.



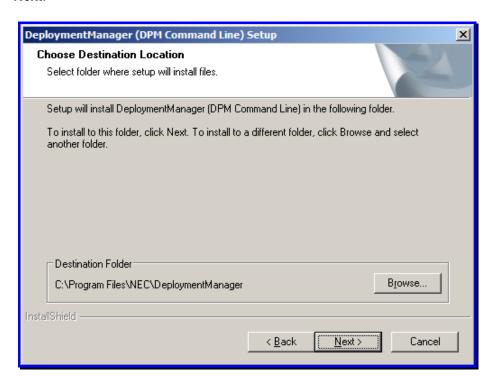
(2) The Confirmation screen appears. Click Yes.



(3) The Welcome to DeploymentManager (DPM Command Line) Setup wizard begins. Click Next.



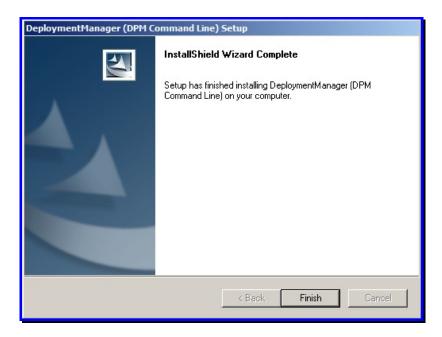
(4) The Choose Destination Location screen appears. Specify the folder for installation and click Next.



Important

Note the specified installation folder. To use DPM Command Line, go to the installation destination from the command prompt. The default installation folder is: C:\Program Files\NEC\DeploymentManager.

(5) The InstallShield Wizard Complete screen appears. Click Finish.



The installation of DPM Command Line is completed.

Tips

For details on how to use DPM Command Line, see Section 8, "DPM Command Line" in *Reference Guide*.

# 2.5. Installing PackageDescriber

PackageDescriber is a tool used to create packages and register them on the Package Web Server.

When you install PackageDescriber, note the following:

- About the supported OS, see Section 3.8, "PackageDescriber" in First Step Guide.
- Check the disk space required to install PackageDescriber.
- Before installing PackageDescriber, install JRE.

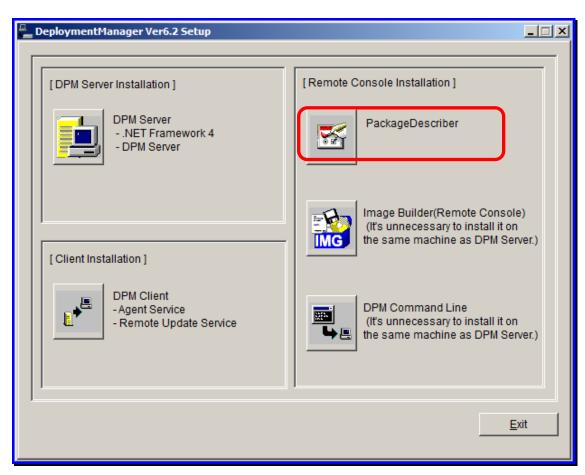
The following describes how to install PackageDescriber.

Log on to the machine where PackageDescriber is to be installed using a user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

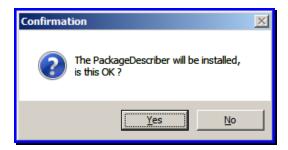
(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **PackageDescriber**.



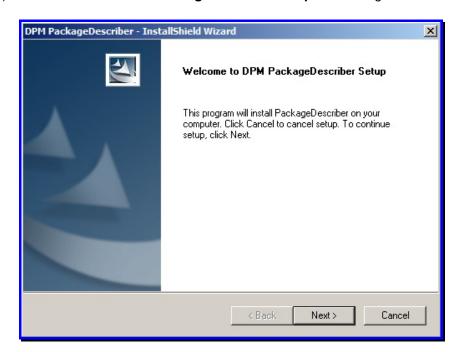
Note

If you want to install PackageDescriber in an environment where UAC is enabled on Windows Vista, be sure to follow the procedure below.

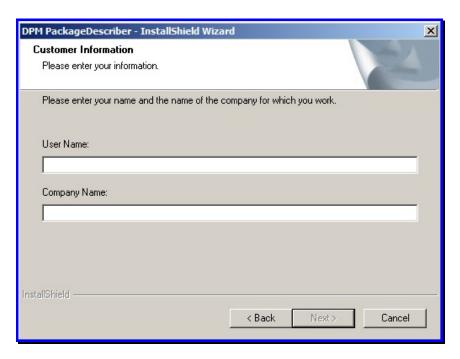
- 1) On the DeploymentManager Setup Screen, click Exit.
- 2) Using Explorer and so on, right-click the following files and select **Run as Administrator**.
  - ·For SSC product:< Installation media>:\DPM\Launch.exe
  - ·For DPM unbundled product:< Installation media>:\Launch.exe
- 3) The **DeploymentManager Setup** screen appears again. Select **PackageDescriber**.
- (2) The Confirmation screen appears. Click Yes.



(3) The Welcome to DPM PackageDescriber Setup screen begins. Click Next.

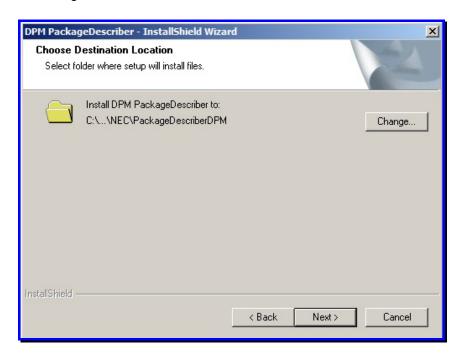


(4) The **Customer Information** screen appears. Enter the **User Name** and **Company Name**, and click **Next**.

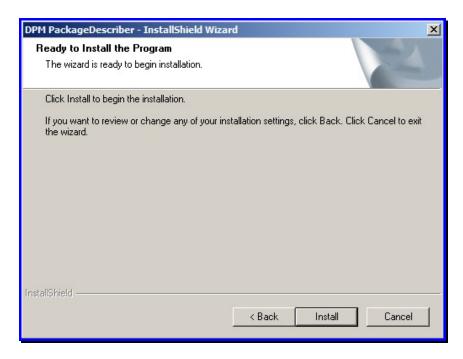


(5) The **Choose Destination Location** screen appears. Specify the folder for installation and click **Next**.

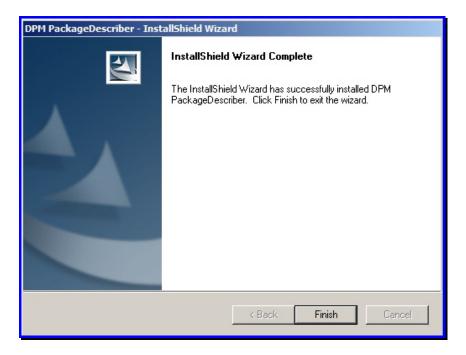
The default setting is C: $\Program\ Files\NEC\PackageDescriberDPM$ . Click **Change** to change the setting.



(6) The **Ready to Install the Program** screen appears. Click **Install**.



(7) The InstallShield Wizard Complete screen appears. Click Finish.



The installation of PackageDescriber is completed.

After the installation is completed, a shortcut is added to the **Start** menu.

# 3. Upgrading DPM

This chapter describes how to upgrade the environment, in which DPM of old version (version earlier than DPM Ver6.2) is installed, to DPM Ver6.2.

End all the running applications, Explorer, and the Web browser.

# 3.1. Before Upgrading DPM

### 3.1.1. Upgrading Precautions

The following describes how to upgrade each function of DPM. Before upgrading, end DPM related tasks. If Event Viewer is running, close Event Viewer as well.



- Only the following upgrading can be performed:
  - ·From a Standard Edition product of DPM Ver5.1 or later to a DPM unbundled product of this current version
  - ·From a Enterprise Edition product of DPM Ver5.1 or later to a DPM unbundled product of this current version
  - ·From a SSC product of SSC2.0 (DPM Ver5.1) or later to a SSC product of this current version
- If you want to upgrade a DPM unbundled product from an older version, you need to register the license key for this current version after upgrading. If you do not register the license key, you cannot use DPM.
  - If you have a PP support service agreement, you can upgrade the version in accordance with the media license free-of-charge. Apply for a version upgrade through the PP support service.
  - You can use your license key as is for revision upgrades (when the upgrade is for a DPM version of x.y with a different y only).
  - For the detail of the license registration, see Section 5.1.4, "Registering the License Kev."
  - (For SSC products, see SigmaSystemCenter Installation Guide).
- Management Server for DPM, Web Server for DPM and Database which is earlier than DPM Ver6.0 are integrated into DPM Server in DPM Ver6.0 and later. The data of each component in the version earlier than DPM Ver6.0 will be handled as follows at the time of the upgrade.
  - The data of the Management Server for DPM will be inherited at the time of upgrade.
  - When you upgrade from DPM Ver5.1 or later to this version, the instance of the database, which was used before the upgrade, is inherited and it can be also used in this version after the upgrade.
  - Web server for DPM (DPM data used by Tomcat) is removed when upgrading DPM Server to DPM Ver6.0 and later because it is not used any more.
- DPM Ver6.0 and later does not use Tomcat which was used in versions earlier than DPM Ver6.0. Uninstall Tomcat as necessary. For the uninstallation method, see the user's guide of the version you used.

[DPM Ver5.x or later]

Execute the following.

- <Installation media>:\DPM\TOOLS\TomcatUninstall\Tomcat\_Silent\_Uninst\_60.bat
- The upgrade installation which DPM Ver5.x Management Server for DPM and the database configured with different machines cannot be performed. Also, for Management Server for DPM and Web server for DPM configured with different machines, please perform an upgrade installation of DPM Server on the machine that has installed Management Server for DPM. Web server for DPM does not use, so please uninstall it. Uninstall Tomcat itself if necessary.
- Before upgrading, confirm this version is supported by seeing Appendix A,

- "Function Tables" in First Step Guide.
- If you changed the port in the version before upgrading, the port will be inherited at the time of the upgrade.
- In the case of changing the port used by DPM after upgrading, see Section 9.5, "Procedure to Change the Port Used by DPM" in *Reference Guide*.



- You cannot perform upgrades from "Programs and Features".
- Perform upgrades from the installation media.

# 3.2. Upgrading the DPM Server

The following describes how to upgrade DPM Server.

Upgrade on the machine in which DPM Server (Management Server for DPM on versions earlier than DPM Ver6.0) is installed.

The upgrade procedure varies depending on the version.



- If Tomcat is installed, stop the "Apache Tomcat" service.
- Confirm that Windows Installer 4.5 or later has been installed. Windows Installer 4.5 is provided on the installation media. [For Windows Server 2008 (x64)]

< *Installation media*>:\dotNet Framework40\Windows6.0-KB942288-v2-x64.msu [For Windows Server 2008 (x86)]

< *Installation media*>:\dotNet Framework40\Windows6.0-KB942288-v2-x86.msu [For Windows Server 2008 R2/Windows Server 2012]

Installed by default. Installation is not required.

- If you want to upgrade from a version earlier than DPM Ver6.0, you will need to install and set up IIS. See Section 1.2.1, "Installing Internet Information Services (IIS)."
- For backup image files created by DPM with a version earlier than DPM Ver6.0, note the following:
  - Files are not automatically moved to the Folder for Backup Image set on the Web Console of this version. Move the files to the Folder for Backup Image manually.
  - If a backup image file is located in the Folder for Backup Image, the backup image file appears as an image on the Image List screen of the Web Console, but the information related to the image does not. To display the related information, you will need to execute backup once again.
- The OS clear installation function of Windows OS cannot be used from DPM Ver6.0. If you used the OS clear installation function with a version earlier than DPM Ver6.0, perform the following before upgrading.
  - Please delete scenarios that include Windows OS clear installation on the Web Console.
  - Please delete the OS image used for OS clear installation (Windows) from Image Builder -> Delete registered data -> Operating system.
- About DPM Ver6.02 or later, "/"(slash) cannot be used as a machine group name and a scenario group name. Therefore, when you upgrade from the version earlier than DPM Ver6.02, if the group name includes "/", the "/" will be automatically converted to "\_"(underscore). If there are the same group names, the content of two groups will be merged by this conversion.



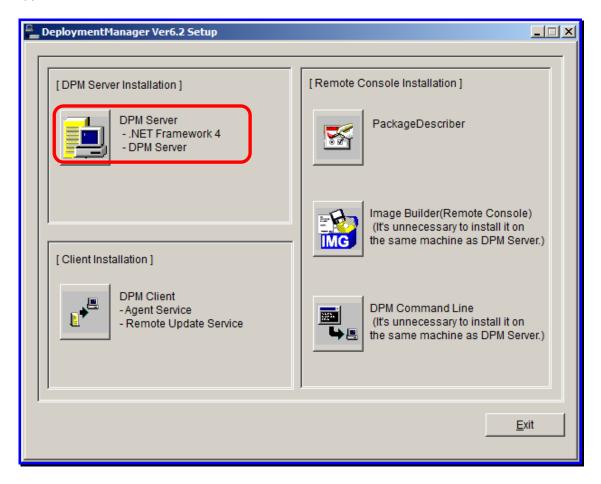
- Be sure to remove the service packs, hotfixes, and applications that you do not plan to use in this version in advance.
- About the database configuration procedure for each product of the SQL Server, contact your sales or support representative.
- Update JRE as necessary.

Log on to the machine to be upgraded using a user of Administrator authority.



In the case of Windows Server 2012, be sure to log on with Administrator user and install.

(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **DPM Server**.

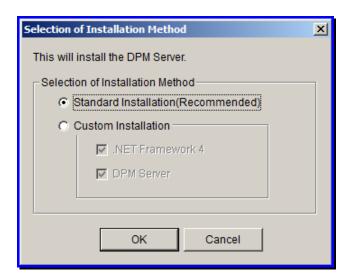


(2) The Selection of Installation Method screen appears. Select Standard Installation, and click OK.

Clicking Cancel returns the screen to the **DeploymentManager Setup** screen.



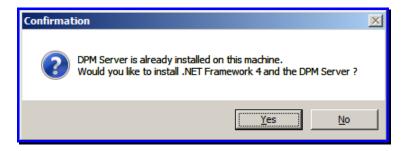
- The checked items will be installed in their listed order if **Custom Installation** is selected.
- In an environment in which .NET Framework is already installed, select **Custom Installation**, clear .NET Framework 4, and click **OK** button.



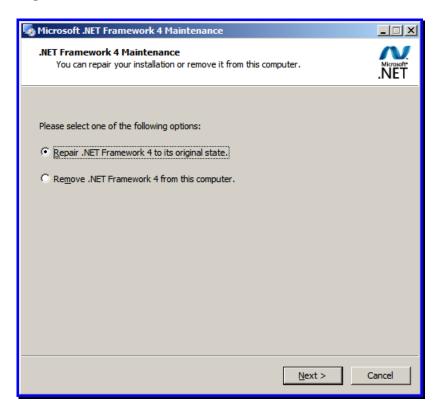


In the case of Windows Server 2012, select **Custom Installation**, clear **.NET Framework 4**, click **OK**, and go to (6).

(3) The Confirmation screen appears. Click Yes.



(4) The .NET Framework 4 Maintenance screen appears. Select Repair .NET Framework 4 to its original state and click Next.

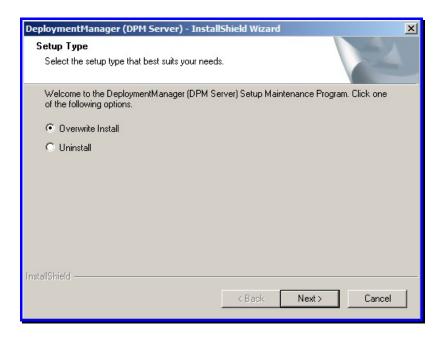


(5) The following screen appears. Click **Finish**.

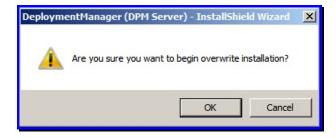


Note

- If the screen prompting you to restart the machine appears after you click **Finish**, restart the machine following the instructions on the screen.
- If you restart the machine, do Steps (1) to (3), click **Cancel** in Step (4), and then go to (6).
- (6) The **Setup Type** screen appears. Select **Overwrite Install** and click **Next**.



(7) A confirmation screen appears. Click OK.



(8) Wait until the processing is completed.

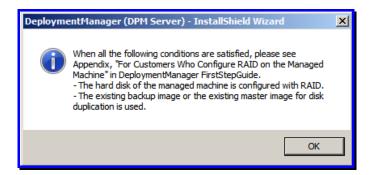
Next, the IIS confirmation screen appears. Click **Yes**.



Tips

If you click **No**, it may fail to access IIS, and **DeploymentManager Login** screen may not appear. Please install DPM Server again when it failed to access IIS.

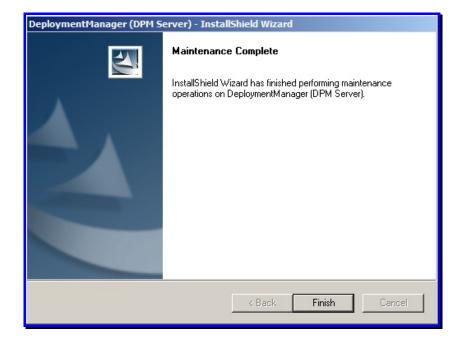
(9) The following screen appears. Click **OK**.



(10) The following screen appears. Click OK.



(11) The Maintenance Complete screen appears. Click Finish.



Important

If the module for the machine model was installed before upgrading, you need to install it again. About the module for the machine model, contact your sales or support representative.

When you installed the following modules for the machine model, you do not need to install them again after upgrading.

- DPM51\_52\_004
- DPM51\_52\_007
- DPM51\_52\_008
- DPM51\_52\_009
- DPM51\_52\_010
- DPM51\_52\_011
- DPM51\_52\_012
- DPM51\_52\_013

Note

The screens that appear during the installation may vary according to the OS.

Tips

If the Windows Firewall/Internet Connection Sharing (ICS) service is running, the port required for DPM Server will open automatically.

For details on the opened port, see Appendix D, "Network Port and Protocol List" in *Reference Guide*.

The upgrade of DPM Server is completed.

# 3.3. Upgrading the DPM Client

The following describes how to upgrade DPM Client.

Upgrade on the machine in which DPM Client (Client Service for DPM on versions earlier than DPM Ver6.0) is installed.

DPM target versions to upgrade are DPM Ver4.0/4.1/4.2/4.3/5.0/5.1/5.2/6.0/6.1/6.2 and there are the following ways to upgrade.

- Automatic upgrading
   If you upgrade DPM Server, DPM Client is automatically upgraded. For details, see Section 3.3.1,
   "Automatically Upgrading the DPM Client."
- Manual upgrading
  As ways except the automatic upgrading, there are "Upgrading the DPM Client from a scenario" and "Upgrading the DPM Client by installation media." For details, see Section 3.3.2, "Manually Upgrading the DPM Client."



When you upgrade from DPM Client(Windows(x86/x64)) earlier than DPM Ver6.2 to this version, DPM Client is installed under the system folder(%windir%\System32). The size displayed in **Programs and Features** is less than the actual size of DPM Client.

#### 3.3.1. Automatically Upgrading the DPM Client

What is Automatic DPM Client Upgrade?

Automatic upgrading of DPM Client is a function that automatically upgrades DPM Client(Client Service for DPM in versions earlier than DPM Ver.6.0) when you upgrade DPM Server. This function is convenient because it takes time to reinstall DPM Client of this current version one by one. The automatic upgrading is executed when the machine with the installed DPM Client is started. When the machine is started, DPM Client is started and communicates with DPM Server. If the version/revision of DPM Client differs from that of DPM Server, automatic upgrade will be executed.



- If DPM Client is not upgraded and the version is not matched with DPM Server, scenarios and so on may not work properly. If you changed the port, old version of DPM Client(earlier than DPM Ver6.2) cannot communicate, and backup/restore/disk configuration check/OS installation by disk duplication/scenario execution results and so on do not operate correctly. Be sure to upgrade DPM Client to the same version/revision as DPM Server.
- The system automatically upgrades DPM Client only when **Upgrade DPM Client** automatically is checked on the **General** tab found by selecting **Management** view on the Web Console and clicking **DPM Server** -> **Detail Setting**.
- If you run a DPM Client automatic upgrading, the "System\_AgentUpgrade\_Unicast" or "System\_LinuxAgentUpgrade\_Unicast" scenario managed internally by DPM will be automatically assigned. If another scenario was already assigned, that scenario is released. The automatic upgrade scenario remains assigned after execution. If the released scenario specified a schedule is needed, be sure to reassign it after the automatic upgrading.
  - Note that an automatic upgrade scenario cannot be executed manually.
- If DPM Client was automatically upgraded on a Linux client, do not execute another scenario for a period of about two minutes after the scenario starts.

Note

- If the managed machine was started by scenario execution from a power OFF state, automatic upgrading is not performed.
- Automatic upgrading is treated as scenario execution, and thus the execution results appear on the Scenario Execution Result List screen.
- When the firewall service on the managed machine is set as automatic start, all ports are closed from the start of managed machines to the start of the firewall service regardless of that the firewall function is enabled or disabled. (Automatic upgrade of DPM Client fails.) In this case, upgrade by scenario, seeing Section 3.3.2, "Manually Upgrading the DPM Client."
- After automatic upgrade execution, the service of DPM Client is restarted after ten to twenty seconds. If you execute another scenario during this scenario, a scenario execution error may occur.
- This procedure is for upgrading DPM Client to the current version. The procedure cannot be used to install DPM Client newly on a managed machine in which DPM Client is not installed.
- The following log is sometimes outputted to the event log of DPM Server: depssvc: Agent Upgrade Error MAC: Sts = (MAC address)

  This log means that it failed to install DPM Client automatically on the displayed managed machine for some reason.

  If this happens, execute the scenario for upgrading DPM Client.

Tips

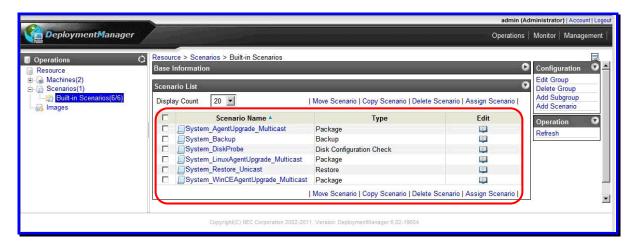
- If it is difficult to restart the managed machine on which DPM Client is installed, restart the following services. Automatic upgrading can be performed.
  - DPM Client(Windows)
    - DeploymentManager Remote Update Service Client
  - DPM Client(Linux)
    - Depagt
- When either of the services below is running, the port and program required for DPM Client will open automatically. (For details on the opened port and program, see Appendix D, "Network Port and Protocol List" in *Reference Guide*).
  - ·Windows Firewall/Internet Connection Sharing (ICS)
  - ·Windows Firewall

#### 3.3.2. Manually Upgrading the DPM Client

Upgrading DPM Client from a scenario

What Does It Mean to Upgrade DPM Client from a Scenario?

Aside from the automatic DPM Client upgrade, a scenario for upgrading DPM Client (Client Service for DPM in versions earlier than DPM Ver6.0) is registered in the system in advance. You can upgrade DPM Client by executing this scenario.



\*System\_AgentUpgrade\_Multicast is the upgrade scenario for Windows (x86/x64). System\_LinuxAgentUpgrade\_Multicast is the upgrade scenario for Linux (x86/x64).



- Change the **Maximum Targets** and **Maximum Waiting Time** in accordance with the environment to use.
  - If you change any item except the above, DPM Client may not be upgraded. In particular, be sure to specify the Execution Time Setting as **Execute Immediately After Distribution**.
- DPM Client is upgraded after the upgrade scenario is completed. Normally, this processing will take about tens of seconds. During this period, do not execute another scenario.
- Upgrading DPM Client by installation media
- Windows(x86/x64)

The following describes how to upgrade DPM Client from the installation media [Windows (x86/x64)].

Log on to the machine to be upgraded by user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

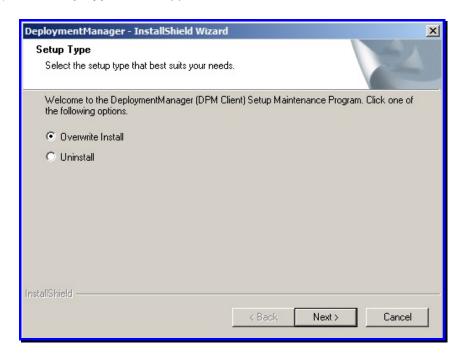
Insert the installation media into the DVD drive.
 If the Installer starts, click Exit to close the screen.

(2) From Explorer and so on, execute the following files located on the installation media. For SSC product: <*Installation media*>:\DPM\Setup\Client\setup.exe For DPM unbundled product: <*Installation media*>:\Setup\Client\setup.exe

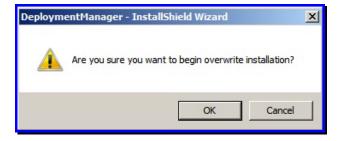


You can install DPM Client by copying the contents of the folders in the installation media to the managed machine and executing setup.exe.

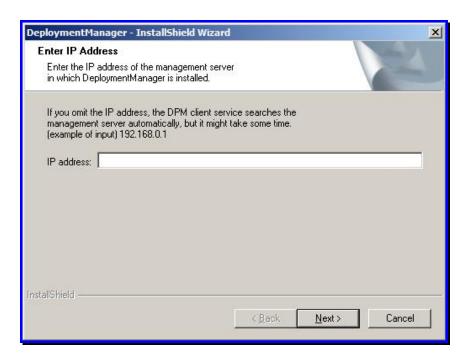
- For SSC product:< Installation media>:\DPM\Setup\Client
- For DPM unbundled product:< Installation media>:\Setup\Client
- (3) The Setup Type screen appears. Select Overwrite Install and click Next.



(4) A confirmation screen appears. Click OK.



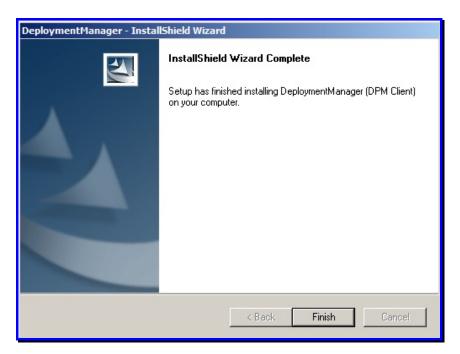
(5) The Enter IP Address screen appears. Enter the IP address of the Management Server where DPM Server is installed, and click Next. If IP address is omitted, DPM Client searches the Management Server automatically after the installation is completed. It may take some time to search.



Note

- DPM Client has the information of the IP address of the Management Server and the port used by DPM Server and DPM Client. When DPM Client cannot connect to DPM Server by the IP address and the port at the timing that the service of DPM Client is started, it is judged as that the IP address of the Management Server has changed or the port used by DPM Server has changed and DPM Client searches the Management Server. The result of the search is saved on the managed machine.
  - The part of the communication sequence of DHCP is used to search the Management Server. DPM Client uses the port of UDP:68 to receive the data from the Management Server. When DPM Client cannot bind the network by the port of UDP:68, it fails to search the Management Server.
  - DHCP client of OS standard uses the port of UDP:68. It is already confirmed that there is no problem.
- When DPM Client searches the Management Server in the environment that there are multiple Management Servers, DPM Client obtains the IP address of the Management Server which responded first.

### (6) The **InstallShield Wizard Complete** screen appears. Click **Finish**.



Note

The screens that appear during installation may vary, depending on the OS.

Tips

See Appendix A, "Silent Installation" to execute silent installation, which does not require you to enter the IP address of the Management Server or to perform key operations during installation.

If either of the services below is running, the port and the program required for DPM Client will be opened automatically.

(For details on the opened port and program, see Appendix D, "Network Port and Protocol List" in *Reference Guide*).

- Windows Server 2003: Windows Firewall/Internet Connection Sharing(ICS)
- Windows Server 2008/Windows Server 2012: Windows Firewall

The upgrade of DPM Client (x86/x64) is completed.

#### Linux

The method used to upgrade DPM Client (Linux) from the installation media is the same as that for a new installation. See Section 2.2.2, "Installing the Linux (x86/x64) Version."

# 3.4. Upgrading Image Builder (Remote Console)

The following describes how to upgrade Image Builder (Remote Console).



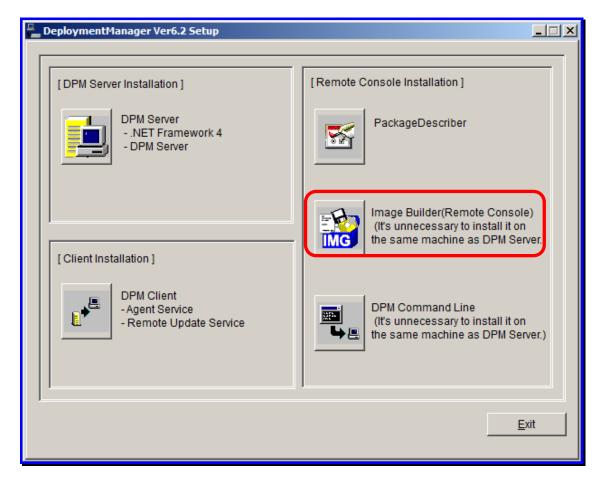
Update JRE as necessary.

Log on to the machine to be upgraded by user with Administrator authority.

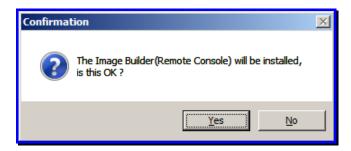


In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

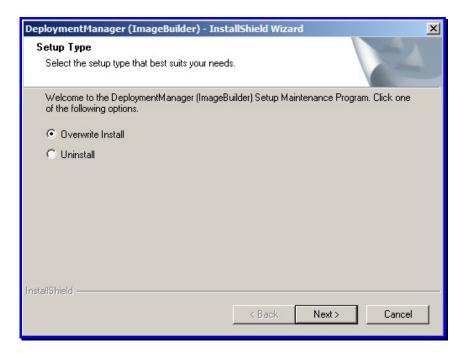
(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **Image Builder(Remote Console)**.



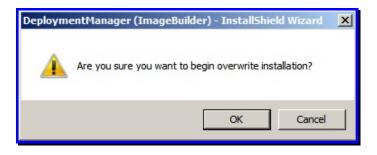
(2) The Confirmation screen appears. Click Yes.



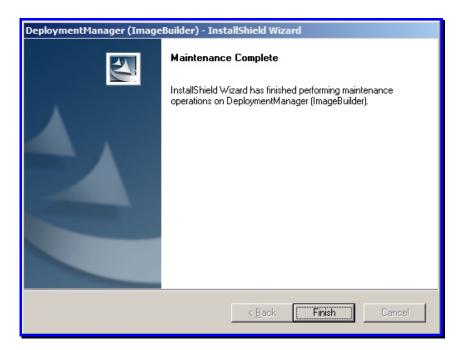
(3) The **Setup Type** screen appears. Select **Overwrite Install** and click **Next**.



(4) A confirmation screen appears. Click OK.



(5) The Maintenance Complete screen appears. Click Finish.



The upgrade of Image Builder (Remote Console) is completed.

# 3.5. Upgrading DPM Command Line

The following describes how to upgrade DPM Command Line.

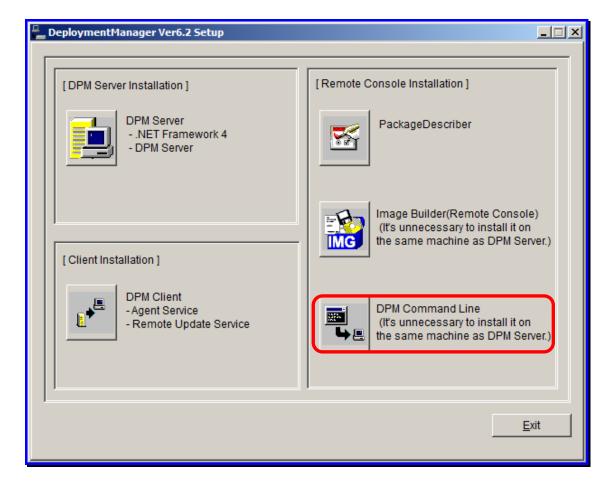
Perform the upgrade process on the machine in which DPM Command Line (Command Line for DPM on versions earlier than DPM Ver6.0) is installed.

Log on to the machine to be upgraded by user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

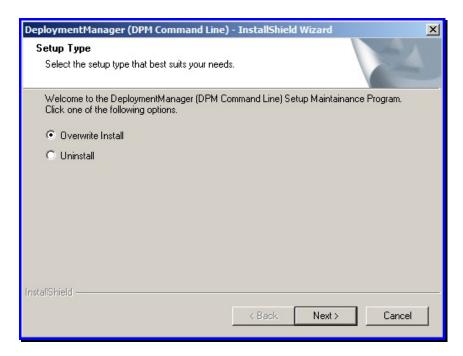
(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **DPM Command Line**.



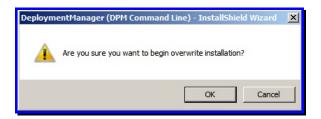
(2) The Confirmation screen appears. Click Yes.



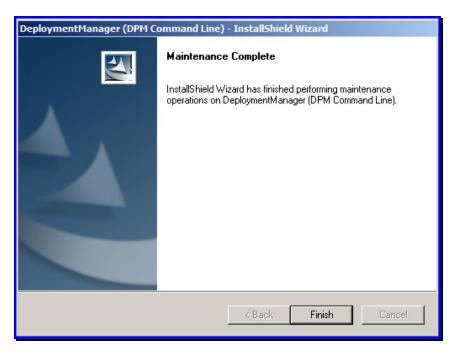
(3) The Setup Type screen appears. Select Overwrite Install and click Next.



(4) A confirmation screen appears. Click **OK**.



(5) The **Maintenance Complete** screen appears. Click **Finish**.



The upgrade of DPM Command Line is completed.

## 3.6. Upgrading PackageDescriber

The following describes how to upgrade PackageDescriber.



After you perform an upgrade installation, you need to re-do the initial setup as noted in "Section 6. Package Describer" in *Reference Guide*.



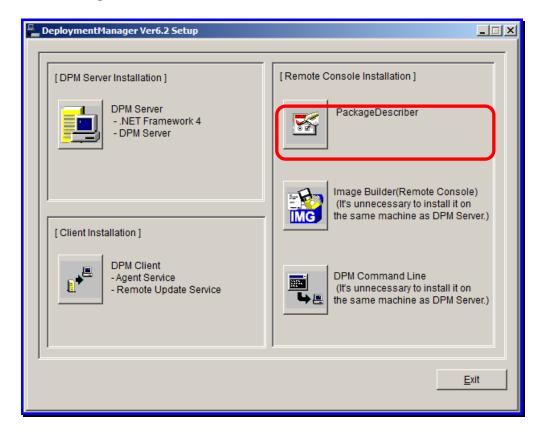
Update JRE as necessary.

Log on to the machine to be upgraded by user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

(1) Insert the installation media into the DVD drive. The **DeploymentManager Setup** screen appears. Select **PackageDescriber**.



Note

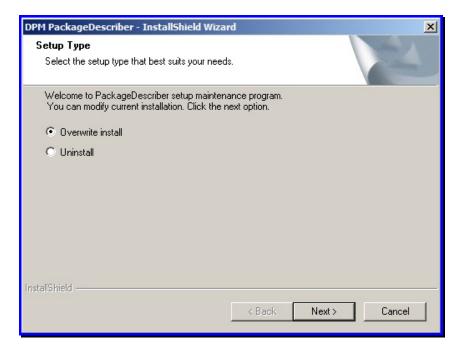
If you want to upgrade PackageDescriber in an environment where UAC is enabled on Windows Vista, be sure to follow the procedure below.

- (1)On the **DeploymentManager Setup Screen**, click **Exit**.
- (2)Using Explorer and so on, right-click the following files and select **Run as Administrator**.
  - For SSC product: < Installation media>:\DPM\Launch.exe
  - For DPM unbundled product: < Installation media>:\Launch.exe
- (3)The **DeploymentManager Setup** screen appears again. Select **PackageDescriber**.

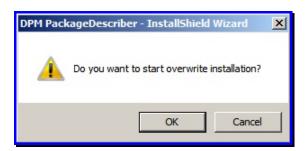
(2) The Confirmation screen appears. Click Yes.



(3) The Setup Type screen appears. Select Overwrite Install and click Next.



(4) A confirmation screen appears. Click OK.



(5) The **Maintenance Complete** screen appears. Click **Finish**.



The upgrade of PackageDescriber is completed.

# 4. Uninstalling DPM

This chapter describes how to uninstall DPM.

## 4.1. Before Uninstalling DPM

## 4.1.1. Uninstall Precautions

The following describes how to uninstall each function of DPM.

Before uninstalling, end DPM related tasks.

End all the running Event Viewer, applications, Explorer, and the Web browser.

## 4.2. Uninstalling the DPM Server

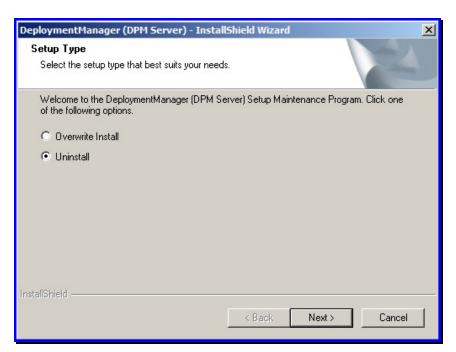
If you want to uninstall DPM Server, follow the procedure below.

Log on to the machine where DPM Server is to be uninstalled using a user with Administrator authority.



In the case of Windows Server 2012, be sure to log on with Administrator user and uninstall.

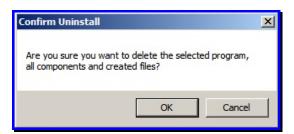
(1) From the **Start** menu of the Management Server, select **All Programs -> DeploymentManager** -> **Uninstall DPM Server**. The **Setup Type** screen appears. Select **Uninstall** and click **Next**.



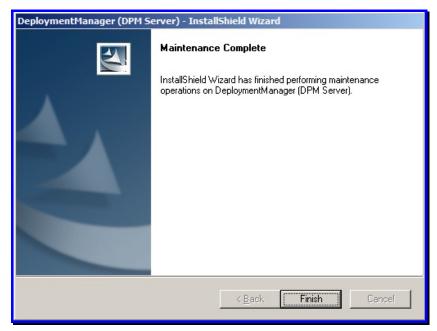
Tips

By selecting **DeploymentManager(DPM Server)** in **Programs and Features** of OS and clicking **Change** button or **Uninstall** button, the above **Setup Type** screen can appear.

(2) The Confirm Uninstall screen appears. Click OK.



(3) The **Setup Status** screen appears and the uninstall process begins. When the **Maintenance Complete** screen appears, click **Finish**.



When you uninstall DPM Server after uninstalling the database which was configured on the Database Server, the following screen appears. Click **OK** and complete uninstalling of DPM Server.

DeploymentManager (DPM Server) - InstallShield Wizard

It failed to delete the configuration of Management Server that stored in the database.

The database is already deleted or connection to database failed.

- (4) Uninstall the database according to the environment to use.
  - When you configure the database on the same machine as DPM Server By seeing the information by Microsoft(the following), uninstall the instance. http://technet.microsoft.com/en-us/library/ms143412.aspx
  - When you configure the Database Server
     See "Uninstalling the database" in Appendix D, "Configuring Database Server" and uninstall it.

If the following components are not used by other applications, uninstall them from **Programs and Features** of OS.

- When you installed DPM Ver6.2 newly
  - Microsoft SQL Server 2008 Setup Support Files
  - Microsoft SQL Server 2012 Native Client
  - Microsoft SQL Server 2012 Transact-SQL ScriptDom
  - Microsoft VSS Writer for SQL Server 2012
  - SQL Server Browser for SQL Server 2012
- In the environment that DPM Server was upgraded from the earlier version to this version, when there are the following components
  - Microsoft SQL Server 2005
  - Microsoft SQL Server 2008 Native Client
  - Microsoft SQL Server Native Client
  - Microsoft SQL Server VSS Writer
  - Microsoft SQL Server setup support files (English)

## 4.3. Uninstalling the DPM Client

The following describes how to uninstall DPM Client.

## 4.3.1. Uninstalling the Windows (x86/x64) Version

There are two ways to uninstall DPM Client (Windows (x86/x64): from the command prompt, and from **Programs and Features** of OS.



- In the following cases, uninstall DPM Client seeing the section, "Uninstalling DPM Client from Programs and Features." In other cases, uninstall it seeing the section, "Uninstalling DPM Client from the Command Prompt."
  - ·When  ${\bf DeploymentManager}$  appears on the  ${\bf Programs}$  and  ${\bf Features}$  screen of OS
  - ·Windows Server 2008 (Server Core installation)
  - ·Windows Server 2012 (Server Core installation)
- Do not uninstall immediately after installation of DPM Client or starting the client services. If the processing for searching the Management Server is running, DPM Client may not be uninstalled correctly.
- Uninstalling DPM Client from the Command Prompt



For the x64 architecture machine, read "system32" as "SysWOW64", and proceed with operations.

Log on to the machine where DPM Client is to be uninstalled using a user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and uninstall.

 Start the command prompt and move to the folder where DPM Client is installed. cd /d < **DPM Client installation folder**>

#### Example>

cd /d %ProgramFiles%\NEC\DeploymentManager\_Client

Note

When you upgraded from the version earlier than DPM Ver6.2 to this version, DPM Client installation folder is "%windir%\System32"(Fixed).

(2) From the command prompt, execute the commands in the following order to uninstall the remote update service.

rupdsvc.exe -remove

del rupdsvc.exe

del clisvc.ini

(3) From the command prompt, execute the commands in the following order to uninstall the agent service.

depagent.exe -remove

del depagent.exe

del depagent.dll

del depinfo.dll

(4) From the command prompt, execute the following commands to uninstall the automatic update status display tool.

del DPMtray.exe

- (5) From the **Start** menu, move to the Programs folder. cd %allusersprofile%\Start Menu\Programs
- (6) From the command prompt, execute the following command to delete the shortcut to the automatic update status display tool. rmdir/s/q DeploymentManager



If the shortcut of the Automatic Update Status Display tool has not been created, when the above mentioned command is executed, though an error is displayed, there is no problem. End the command prompt.

Uninstalling DPM Client from Programs and Features.

Log on to the machine where DPM Client is to be uninstalled using a user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and uninstall.

(1) From the Start menu, select Control Panel -> Programs and Features -> DeploymentManager and click Uninstall button.

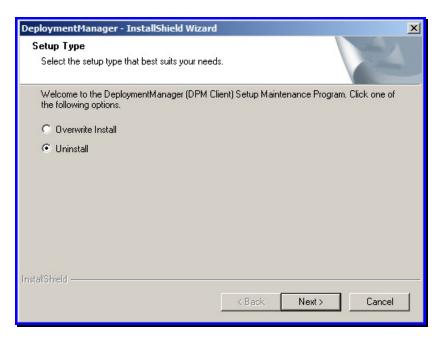


For Windows Server 2008(Server Core installation) or Windows Server 2012(Server Core installation), this is not displayed in **Programs and Features**, so please execute the following file from the command line.

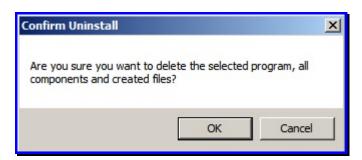
- For x86:
- "%SystemDrive%\Program Files\InstallShield Installation Information\ {6F68AC00-5FFD-42DE-B52E-D690D3DD4278}\setup.exe" -runfromtemp -l0x0011uninstall -removeonly
- For x64:

"%SystemDrive%\Program Files(x86)\InstallShield Installation Information\ {6F68AC00-5FFD-42DE-B52E-D690D3DD4278}\setup.exe" -runfromtemp -l0x0011uninstall -removeonly

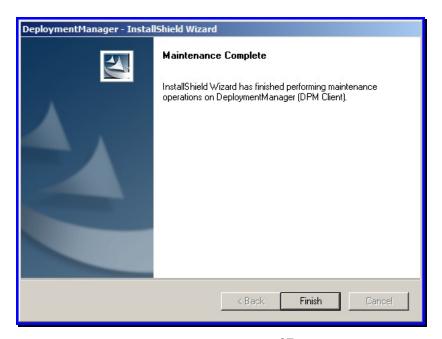
(2) The **Setup Type** screen appears. Select **Uninstall** and click **Next**.



(3) The Confirm Uninstall screen appears. Click OK.



(4) The Maintenance Complete screen appears. Click Finish.



## 4.3.2. Uninstalling the Linux (x86/x64) Version

The following describes how to uninstall DPM Client [Linux (x86/x64) version].

- (1) Log in to the machine where DPM Client (Linux) is installed as root account.
- (2) Insert the installation media into the DVD drive.
- (3) Mount the installation media. # mount <DVD drive to mount>



For more information about using the mount command, please see the manual of used OS.

(4) Enter the following command to change the current directory.



- For SSC product: # cd /mnt/dvd/DPM/Linux/ia32/bin/agent
- For DPM unbundled product: # cd /mnt/dvd/Linux/ia32/bin/agent
- (5) Execute depuninst.sh. #./depuninst.sh



Depending on the execution environment, if you do not have the execute permission of depunist.sh on the installation media, you may not be able to execute it. In this case, copy DPM Client module in the Linux directory on the installation media to the correct directory on the hard disk, and then execute chmod command like the example below to grant permission for all of the files and then run depuninst.sh.

### Example)

# cd /mnt/copy destination directory/agent # chmod 755 \*

\* The save location for DPM Client installer is as below.
For SSC product: < *Installation media*>:/DPM/Linux/ia32/bin/agent
For DPM unbundled product: < *Installation media*>:/Linux/ia32/bin/agent

# 4.4. Uninstalling Image Builder (Remote Console)

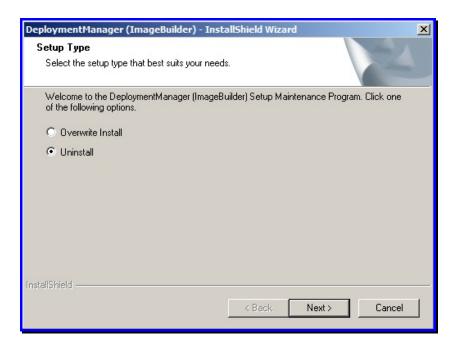
If you want to uninstall Image Builder (Remote Console), follow the procedure below.

Log on to the machine where Image Builder (Remote Console) is to be uninstalled using a user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and uninstall.

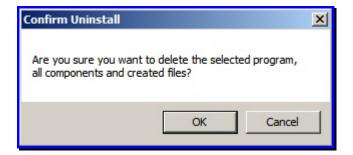
(1) From the Start menu of the machine where Image Builder (Remote Console) is installed, select All Programs -> DeploymentManager -> Uninstall Image Builder. The Setup Type screen appears. Select Uninstall and click Next.



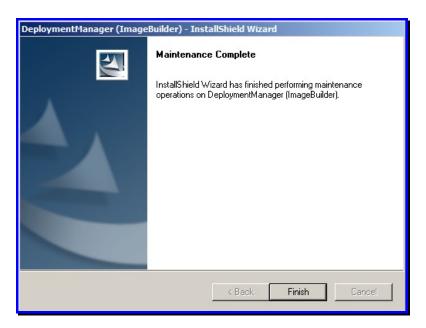
Tips

By selecting **DeploymentManager(Image Builder)** in **Programs and Features** of OS and clicking **Change** button or **Uninstall** button, the above **Setup Type** screen can appear.

(2) The Confirm Uninstall screen appears. Click OK.



(3) When the **Maintenance Complete** screen appears, click **Finish**.



# 4.5. Uninstalling DPM Command Line

The following describes how to uninstall DPM Command Line.

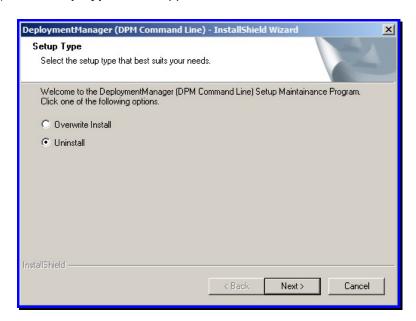
Log on to the machine where DPM Command Line is to be uninstalled using a user with Administrator authority.



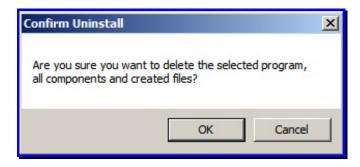
In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and uninstall.

(1) From the Start menu, select Control Panel -> Programs and Features -> DeploymentManager (DPM command line) and click Uninstall.

(2) The **Setup Type** screen appears. Select **Uninstall** and click **Next**.



(3) The Confirm Uninstall screen appears. Click OK.



(4) When the Maintenance Complete screen appears, click Finish.



# 4.6. Uninstalling PackageDescriber

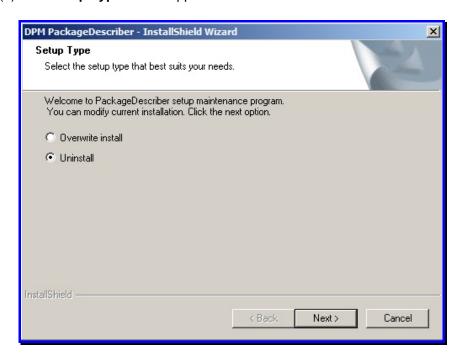
This section describes how to uninstall PackageDescriber.

Log on to the machine where PackageDescriber is to be uninstalled using a user with Administrator authority.

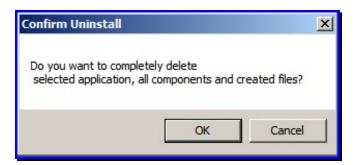


In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and uninstall.

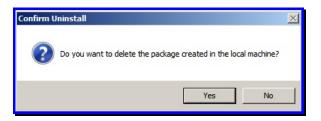
- (1) From the Start menu, select Control Panel -> Programs and Features -> DPM PackageDescriber and click Uninstall.
- (2) The Setup Type screen appears. Select Uninstall and click Next.



(3) The Confirm Uninstall screen appears. Click OK.



(4) The following screen appears. When you delete packages created in the local machine, click **Yes**. If you do not delete them, click **No**.



Tips

If you click  ${f No}$ , the Packages folder under PackageDescriber installation folder is not deleted.

(5) The Maintenance Complete screen appears. Click Finish.



# 5. Preparing for DeploymentManager Operation

This chapter describes how to set initial DPM settings.

# 5.1. Preparing for DPM Operation

The following describes the setup required when using DPM for the first time. Be sure to read this section carefully before operating.

## 5.1.1. Starting the Web Console

Start the Web Console following the procedure below.

(1) Start the web browser.



- Disable the browser cache settings as follows:
  - 1) From the **Tools** menu of Internet Explorer, select **Internet Options** and, on the **General** tab, click **Settings** under **Browsing History**.
  - 2) The Temporary Internet Files and History Settings screen appears. Under Check for newer versions of stored pages, select Every time I visit the webpage and click OK.
- Add DPM Server to Trusted sites and enable JavaScript settings in the browser as follows:
  - 1) From the **Tools** menu of Internet Explorer, select **Internet Options** and, on the **Security** tab, click **Sites** under **Trusted sites**.
  - 2) The Trusted sites screen appears, so enter URL of DPM Server. After clearing Require server verification (https:) for all sites in this zone, click Add and click Close.
  - 3) Click Custom Level of Trusted sites on the Security tab.
  - 4) After selecting "Enable" on following items, click **OK**.
    - Scripting
      - Active Scripting
    - Downloads
      - File download
      - Automatic prompting for file downloads
- If session timeout occurred on the Web Console, the screen is returned to the DeploymentManager Login screen.

Note

When you specify a value except 100% in **Zoom** of the **Page** menu of Internet Explorer, the text on the screen may be misaligned.

(2) Enter the either of the following URL in the address bar of the browser to start the Web Console. (The same page is displayed.)

http://**Host**/DPM/http://**Host**/DPM/Login.aspx http://**Host**/DPM/Default.aspx

In the Host area, enter the DNS name or IP address of the Management Server to be connected on the Web Console.

The area is not case sensitive.



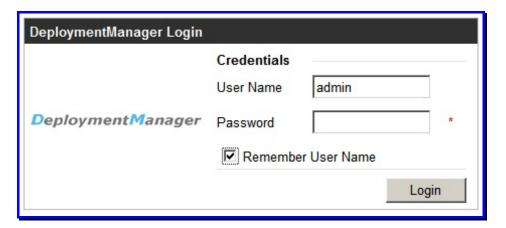
- If the host name of DPM Server includes a character string (excluding single-byte alphanumeric characters and hyphens "-") not recommended by Windows, specify an IP address in the address area of the browser. The Web Console may fail to start when the DNS name is specified.
- When you change the port number used in Web Service(IIS) from the default value(80), specify URL(as below) including the changed port number. http://HOST:Port Number/DPM/



If you access from the same machine with DPM Server, localhost can be entered in the Host area.

http://localhost/DPM/

(3) The DPM Web Console is started. Then the **DeploymentManager Login** screen appears.



## 5.1.2. Logging into DPM

To use DPM functions, you will need to set up user authorities. Enter a user name and password, and click **Login**. (Entry is required.)

Tips

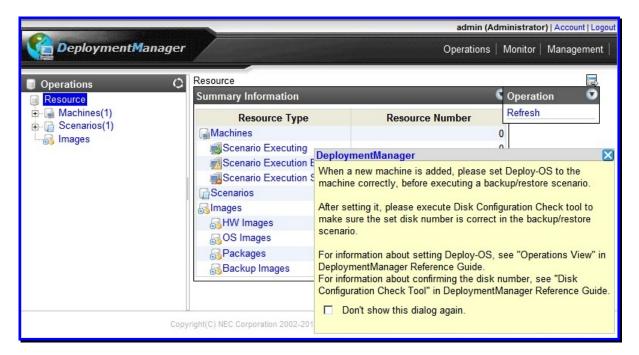
The user name and password for the user with Administrator authority which can be used immediately after installation are as follows:

- · User name "admin"
- Password "admin"

Be sure to change the password after login. About how to change the password of the login user, see Section 5.1.3, "Setting up Login Users." If you forget the changed password when only this user is registered, you cannot log into DPM. In this case, you need to reinstall DPM.

After this, add the user except "admin" user and use it. For details about adding users and user authorities, see Section 2.2, "User Icon" and Section 2.3, "User List" in *Reference Guide*.

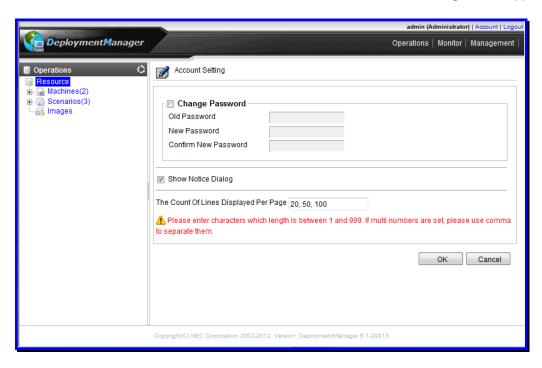
On the Web Console, the **Notice** dialog box appears. Check the contents.



## 5.1.3. Setting up Login Users

Set up the login users as described below. You can change passwords, show or hide the **Notice** dialog box, and set the number of items to be displayed on one page of the list screen under **Account Setting**. For details on the settings of this screen, see Section 1.1.2, "Account" in *Reference Guide*.

(1) Click **Account** on the title bar of the Web console and the **Account Setting** screen appears.



- (2) To change the password, select the **Change password** check box, and enter the password.
- (3) If you do not want to display the **Notice** dialog box that appears at login, clear the **Show Notice Dialog** check box.
- (4) Set the number of items to be displayed on one page of a list screen. In the list screen such as the **Group List** screen on the main window, you can change the number of items to be displayed on the screen. You can select the number of items in the combo box of the list screen here. If the number is set to "20, 50, 100" (default value), for example, you can select one of these values from the combo box. When the screen is opened, the number of items will be 20, which is the first of the three settings.
- (5) Click OK.

## 5.1.4. Registering the License Key

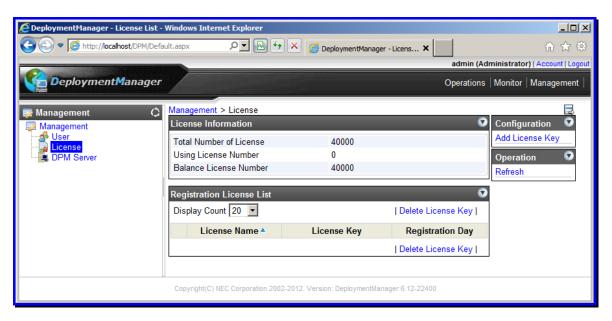


- Only users with Administrator authority can add or remove licenses.
- About license registration of SSC product, see SigmaSystemCenter Installation Guide.

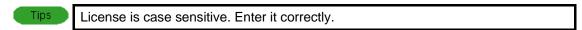
To use DPM, you need to register the license key. Register the license key following the procedure below.



- The number of licenses is not the number of managed machines that can execute scenarios simultaneously by DPM, but the total number of managed machines which are introduced, operated, and managed by DPM.
- You can only register managed machines up to the number of purchased licenses.
- There are two types of licenses: a server target license and a client target license. About the license, see Section 2.3.2, "Product Configurations and Licenses" in *First Step Guide*.
- If you do not register the license key, up to 10 machines can be registered and the trial period is 30 days. After 30 days, you cannot use DPM.
- (1) On the Web Console, click **Management** in the title bar to switch to the **Management** view.
- (2) Click **License** icon in the **Management** tree. **License Information** group box and **Registration License List** group box appears.



- (3) Click Add License Key in the Configuration menu. Add License Key screen appears.
- (4) When a license key is entered in the **Add License Key** screen and you click **OK**, the entered license key information is registered. If you want to register multiple license keys, repeat Steps (3) to (4) according to the number of license keys.



# **Appendix A Silent Installation**

You can install DPM Server and DPM Client by silent installation.

In this section, the procedure for Windows is described. In the case of DPM Client(Linux(x86/x64)), replace the folder path and so on.

End all the running applications, Explorer, and the Web browser.



- Do not change the specified order of silent installation options.
- Be sure to enter the input value inside double-quotation marks ("). (Excluding DPM Client for Linux (x86/x64))

Do not enter a space between the option and equal sign ("=").



- When you enter an option you want to specify, the entry is not upper/lower case sensitive.
- Some options can be omitted.
- (1) Insert the installation media into the DVD drive of the machine in which you want to install DPM Server or DPM Client by silent installation.
- (2) Start the command prompt, and move to the folder that stores the installer of the component you want to install by silent installation.

The folder that stores the installer for each component is as below.

Component	Storage Folder
DPM Server	<installation media="">:\Setup\DPM</installation>
DPM Client(Windows(x86/x64))	<installation media="">:\Setup\Client</installation>
DPM Client(Linux(x86/x64))	< Installation media>:\Linux\ia32\bin\agent



Replace the folder that stores the installer as follows:

- For SSC product: < Installation media>:\DPM
- For DPM unbundled product: < Installation media>:\
- (3) Copy the parameter files (extension: iss) for silent installation from the folder that stores the installer of the component you want to install to the local HDD.

The following describes an example that the files are copied to C:\SilentInstall.

For silent installation parameter files, see the following section, "Creating the Parameter Files for Silent Installation."

(4) Execute the silent installation command. The meaning of options is the following.

See the following section "Installing, Upgrading, and Uninstalling the DPM Server" and "Installing, Upgrading, and Uninstalling DPM Client" for the detail.

Silent Mode   /s   Starts silent mode.   Farameter Files   Parameter files for silent installation.   For further details, see how to create silent installation parameter files described later. The command examples described in the following employ a case example where silent installation parameters files are copied directly under "C:\SilentInstall."   Specify the output destination for the Silent Installation Path   INSTALLDIR   Silent Mode   Specify the path on which DPM Server or DPM Client is installed.   Specify an absolute path in 100 characters or less.   Example)   C:\Program Files\NEC\DeploymentManager   The allowed characters are single-byte aphanumeric characters/single-byte spaces/symbols.   The following symbols cannot be used.   / * * ? * > *   * : %   About the install path of DPM Client, when you perform OS installation by disk duplication, specify the drive which is not affected by reassigning the drive letter. (C drive is recommended.)   Specify the IP address of the Management Server IP   Specify the IP address of the Management Server.   Specify the IP address using numbers and dots.   Example   192.168.0.1   Specify 0, 1, or 2 in x. 0. The port will not be added to an exception in firewall settings.   1: The program of DPM and the port will be added to an exception, but the communication will not be permitted.   Specify the type of SQL Server 2012 SP1   Express(x86) will be installed.   SQL Server 2012 SP1   Express(x86) will be installed.   If SQL server is already installed, SQL Server   SQL SQL Server   SQL SQL Server   SQL	Abbreviation	Option Name	Meaning
Installation Parameter Files    For further details, see how to create silent installation parameter files described later. The command examples described in the following employ a case example where silent installation parameters files are copied directly under "C:\SilentInstall."    Log Output	Silent Mode	/s	
Parameter Files   Installation parameter files described later. The command examples described in the following employ a case example where silent installation parameters files are copied directly under "C:\SilentInstall."	Silent	/f1	Parameter files for silent installation.
Parameter Files   Installation parameter files described later. The command examples described in the following employ a case example where silent installation parameters files are copied directly under "C:\Silentmation"   C:\Silentmation for the Silent Install log.	Installation		For further details, see how to create silent
Command examples described in the following employ a case example where silent installation parameters files are copied directly under "C.\SilentInstall."	Parameter Files		
employ a case example where silent installation parameters files are copied directly under "C:SilentInstall."  Log Output Destination  Silent Mode  Install log.  Silent Mode  Installation Path  Installation Path on the DPM Server or DPM  Client is installed.  Installation Path on the New Path on which DPM Server or DPM  Client is installed.  Installation Path on the Silent Installation Path on the Analysis Installation Path on the Analysis Installation Path on the Installation Path			
Destination   Parameters files are copied directly under "C:\SilentInstall."   Specify the output destination for the Silent   Specify the output destination for the Silent   Install log.   Specify the output destination for the Silent   Install log.   Specify the path on which DPM Server or DPM Client is installed.   Specify the path on which DPM Server or DPM Client is installed.   Specify an absolute path in 100 characters or less.   Example)   C:\Program Files\NEC\DeploymentManager   The allowed characters are single-byte alphanumeric characters/single-byte spaces/symbols.   The following symbols cannot be used.   / * ? < *   1 * %			
C.\SilentInstall."   Specify the output destination for the Silent Install log.			
Log Output Destination   Mode   SILENTDPM   Silent Mode   SILENTDPM   Silent Mode   Installation Path   Installation   Insta			
Destination   Silent Mode   Specify the path on which DPM Server or DPM   Client is installed.   Specify an absolute path in 100 characters or less.   Example   C:\Program Files\NEC\DeploymentManager   The allowed characters are single-byte alphanumeric characters/single-byte spaces/symbols.   The following symbols cannot be used.   /*? <>    : %   About the install path of DPM Client, when you perform OS installation by disk duplication, specify the drive which is not affected by reassigning the drive letter. (C drive is recommended.)   Specify the IP address of the Management Server IP   Specify the IP address using numbers and dots.   Example   192.168.0.1   Specify 0, 1, or 2 in x.   O: The port will not be added to an exception in firewall settings.   1: The program of DPM and the port will be added to an exception and the communication will be permitted.   Specify the type of SQL Server 2012 SP1   Express(x86 or x86).   x86: SQL Server 2012 SP1   Express(x86 or x86).   x86: SQL Server 2012 SP1   Express(x86) will be installed.   K3QL Server is already installed, SQL Server   SQL Server 2012 SP1   Express(x86) will be installed.   If SQL server is already installed, SQL Server   SQL Server 2012 SP1   Express(x86) will be installed.   If SQL server is already installed, SQL Server   SQL Server 2012 SP1   Express(x864) will be installed.   If SQL server is already installed, SQL Server   SQL Server 2012 SP1   Express(x864) will be installed.   If SQL server is already installed, SQL Server   SQL Server 2012 SP1   SQL Server   S	Log Output	/f2	
Silent Mode   Installation Path   INSTALLDIR   Specify the path on which DPM Server or DPM   Client is installed.   Specify an absolute path in 100 characters or less.   Example)   C:\Program Files\NEC\DeploymentManager   The allowed characters are single-byte alphanumeric characters/single-byte spaces/symbols.   The following symbols cannot be used.   /*? <> "   : %   About the install path of DPM Client, when you perform OS installation by disk duplication, specify the drive which is not affected by reassigning the drive which is not affected by reassigning the drive letter. (C drive is recommended.)   Specify the IP address of the Management Server IP   Specify the IP address using numbers and dots.   Example)   192.168.0.1   Specify 0, 1, or 2 in x.   O: The port will not be added to an exception in firewall settings.   1: The program of DPM and the port will be added to an exception and the communication will not be permitted.   2: The program of DPM and the port will be added to an exception, but the communication will not be permitted.   Specify the type of SQL Server 2012 SP1 Express(x86) will be installed.   SQL Server 2012 SP1 Express(x86) will be installed.   If SQL server is already installed, SQL Server			·
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be installed.  If SQL server is already installed, SQL Server			
If SQL server is already installed, SQL Server			
ı yılı not de installed.			will not be installed.

Remote DB Flag	DBSRVREMOTEFLAG	Specify 0 or 1 in x.
		0: The database will be configured on the same machine with DPM Server.
		1: The Database Server will be configured.
IP Address to connect	DBSRVIPADDRESS	Specify the IP address of the Database Server. When you specify "1" in DBSRVREMOTEFLAG, this is required.
		Specify the IP address using numbers and dots.
		Example) 192.168.0.1
Instance Name	DBINSTANCENAME	Specify the instance name of the database. Specify it in 16Byte or less.
		The allowed characters are single-byte alphanumeric characters.
User Name	DBSRVUSERNAME	Specify the user name accessing the database when you configure the Database Server.
		When you specify "1" in DBSRVREMOTEFLAG, this is required.
		Specify it in 30Byte or less.
		The allowed characters are single-byte alphanumeric characters.
User Password	DBSRVPASSWORD	Specify the password of the user accessing the database when you configure the Database Server.
		When you specify "1" in DBSRVREMOTEFLAG, this is required.
		Specify it in 30Byte or less.
		The allowed characters are single-byte alphanumeric characters/symbols.
Web Site Name	WEBSITENAME	Specify the Web Site name of IIS on which Web components of DPM are installed.
		Specify it in 100Byte or less. The allowed characters are single-byte
		alphanumeric characters.
Flag when Using Other TFTP	NOUSEDPMTFTP	Specify 0 or 1 in x. 0: DPM TFTP service will be used.
Services		1: TFTP service except DPM will be used.
TFTP Root	TFTPDIR	Specify TFTP root path. Specify the absolute path in 120Byte or less.
		Example) C:\TFTPRoot
		The allowed characters are single-byte
		alphanumeric characters/single-byte spaces/symbols.
		The following symbols cannot be used.
		/*?<>" :

# Installing, Upgrading, and Uninstalling the DPM Server

### ■ Installing

Setup.exe /s /f1"C:\SilentInstall\DPM\_MNG\_Setup.iss" SILENTDPM INSTALLDIR="Installation Path" MANAGEMENTSERVERIP="Management Server IP" FIREWALL=x SQLARCH="SQL Architecture" DBSRVREMOTEFLAG=x DBSRVIPADDRESS="IP Address to connect" DBINSTANCENAME="Instance Name" DBSRVUSERNAME="User Name" DBSRVPASSWORD="User Password" WEBSITENAME="Web Site Name" NOUSEDPMTFTP=x TFTPDIR="TFTP Root"

The following options can be omitted. The conditions that the options can be omitted and the setting values when options are omitted are as the following table.

Options that can be omitted	Setting value
INSTALLDIR	%ProgramFiles%\NEC\DeploymentManager
MANAGEMENTSERVERIP	"ANY" is set as the IP address.
FIREWALL	"1" is set. The program of DPM Server and the port used by it will be added as an exception and the communication will be permitted.  For a list of ports used, see Appendix D, "Network Port and Protocol List" in <i>Reference Guide</i> .
SQLARCH	In the case that the OS is x86, the SQL Server 2012 SP1 Express(x86) will be installed. In the case that the OS is x64, the SQL Server 2012 SP1 Express(x64) will be installed. If the SQL server is already installed, SQL Server will not be installed.
DBSRVREMOTEFLAG	"0" is set. SQL Server 2012 SP1 Express will be installed on the same machine with DPM Server.
DBSRVIPADDRESS	This option can be omitted when you configure the database on the same machine with DPM Server. In that case, even if this option is specified, it is ignored.
DBINSTANCENAME	"DPMDBI" is set.
DBSRVUSERNAME	This option can be omitted when you configure the database on the same machine with DPM Server. In that case, even if this option is specified, it is ignored.
DBSRVPASSWORD	This option can be omitted when you configure the database on the same machine with DPM Server. In that case, even if this option is specified, it is ignored.
WEBSITENAME	DPM site will be created in either of "Default Web Site" or "WebRDP".
NOUSEDPMTFTP	"0" is set. DPM TFTP service will be used.
TFTPDIR	"< <b>DPM Server installation folder</b> >\ PXE\Images" is set.

Note

If you install DPM Server on a machine with multiple LAN board by omitting MANAGEMENTSERVERIP, the IP address set on an unintended LAN board may be recognized. Therefore, it is recommended that you should not omit the MANAGEMENTSERVERIP option and should specify the IP address that is to be used by the Management Server (DPM Server) for communication. For the IP address used by the Management Server (DPM Server) for communication, see Section 2.7.1, "Detail Setting" in *Reference Guid*e.

## ■ Upgrade Installation

Setup.exe /s /f1"C:\SilentInstall\DPM\_MNG\_RESetup.iss" SILENTDPM FIREWALL=x SQLARCH="SQL Architecture"



Upgrading DPM Server is possible if DPM Ver5.1 or later is installed.

The following options can be omitted. When they are omitted, the values are set as the following table.

Options that can be omitted	Setting value
FIREWALL	"1" is set. The program of DPM Server and the port used by it will be added as an exception and the communication will be permitted.  For a list of ports used, see Appendix D, "Network Port and Protocol List" in <i>Reference Guide</i> .
SQLARCH	In the case that the OS is x86, the SQL Server 2012 SP1 Express(x86) will be installed. In the case that the OS is x64, the SQL Server 2012 SP1 Express(x64) will be installed. If the SQL server is already installed, SQL Server will not be installed.

### **■** Uninstall

Setup.exe /s /f1"C:\SilentInstall\DPM\_MNG\_Uninst.iss" SILENTDPM

# Installing, Upgrading, and Uninstalling the DPM Client

■ Install the Windows (x86/x64) version as described below.

#### Installing

Setup.exe /s /f1"C:\SilentInstall\DPM\_CLI\_Setup.iss" SILENTDPM INSTALLDIR="
Installation Path" DPMSERVERIP="Management Server IP" FIREWALL=x

The following options can be omitted. When they are omitted, the values are set as the following table.

Options that can	Setting value
be omitted	
INSTALLDIR	%ProgramFiles%\NEC\DeploymentManager_Client
DPMSERVERIP	DPM Client searches the Management Server automatically
	after the installation is completed. It may take some time to
	search.

Note

DPM Client has the information of the IP address of the Management Server and the port used by DPM Server and DPM Client. When DPM Client cannot connect to DPM Server by the IP address and the port at the timing that the service of DPM Client is started, it is judged as that the IP address of the Management Server has changed or the port used DPM Server has changed and DPM Client searches the Management Server. The result of the search is saved on the managed machine.

The part of the communication sequence of DHCP is used to search the Management Server. DPM Client uses the port of UDP:68 to receive the data from the Management Server. When DPM Client cannot bind the network by the port of UDP:68, it fails to search the Management Server.

- DHCP client of OS standard uses the port of UDP:68. It is already confirmed that there is no problem.
- When DPM Client searches the Management Server in the environment that there are multiple Management Servers, DPM Client obtains the IP address of the Management Server which responded first.

### ■ Upgrading

Setup.exe /s /f1"C:\SilentInstall\DPM\_CLI\_RESetup.iss" SILENTDPM DPMSERVERIP="*Management Server IP*"

The following options can be omitted. When they are omitted, the values are set as the following table.

Options that can	Setting value
be omitted	
DPMSERVERIP	The Management Server IP address set for the installed DPM
	Client.
FIREWALL	"1" is set. The program of DPM Client and the port used by it are added as an exception and the communication is permitted. For a list of ports used, see Appendix D, "Network Port and Protocol List" in <i>Reference Guide</i> .

#### ■ Uninstalling

Setup.exe /s /f1"C:\SilentInstall\DPM\_CLI\_Uninst.iss" SILENTDPM



Do not uninstall immediately after installation of DPM Client or starting the client services. If the processing for searching the Management Server is running, DPM Client may not be uninstalled correctly.

■ Install the Linux (x86/x64) version as described below.

### ■ Installing/Upgrading

The Management Server IP can be omitted.

When it is omitted, DPM Client searches the Management Server. It takes some time to search.

depinst\_silent.sh Management Server IP > /var/temp/Inst\_DPM\_Lin\_Cli.log

Note

DPM Client has the information of the IP address of the Management Server and the port used by DPM Server and DPM Client. When DPM Client cannot connect to DPM Server by the IP address and the port at the timing that the service of DPM Client is started, it is judged as that the IP address of the Management Server has changed or the port used by DPM Server has changed and DPM Client searches the Management Server. The result of the search is saved on the managed machine.

The part of the communication sequence of DHCP is used to search the Management Server. DPM Client uses the port of UDP:68 to receive the data from the Management Server. When DPM Client cannot bind the network by the port of UDP:68, it fails to search the Management Server.

DHCP client of OS standard uses the port of UDP:68. It is already confirmed that there is no problem except dhcpcd of SUSE Linux Enterprise 10. To use the function of searching the Management Server in SUSE Linux Enterprise 10, it is necessary to start DPM Client with the status that dhcpcd is stopped. When performing OS installation by disk duplication in SUSE Linux Enterprise 10, dhcpcd is necessary. Therefore, be sure to specify the IP address of the Management Server not to search the server. In the case except OS installation by disk duplication, if the managed machine does not need dhcpcd, stop dhcpcd. If dhcpcd is necessary, you cannot use the function of searching the Management Server.

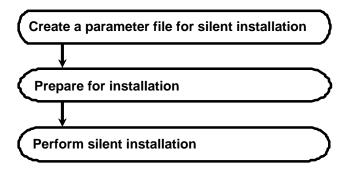
■ When DPM Client searches the Management Server in the environment that there are multiple Management Servers, DPM Client obtains the IP address of the Management Server which responded first.

### ■ Uninstalling

depuninst.sh > /var/temp/Inst\_DPM\_Lin\_Cli.log

■ DPM Client [Windows (x86/x64)] Parameter Creation Method and Silent Installation

About DPM Client [Windows (x86/x64)], you can also perform silent installation by preparing the parameter files for silent installation following the procedure below.



- Creating the Parameter Files for Silent Installation
- (1) Prepare the machine for creating the parameter files.
- (2) Log on to the machine prepared in Step (1) using a user of Administrator authority.
- (3) Insert the installation media into the DVD drive.
- (4) From the **Start** menu, select **Run**, enter **cmd** in the open column, and click **OK**. The command prompt appears. Execute the command below.

SSC product:

<Installation media>:\DPM\Setup\Client\setup.exe -r

DPM unbundled product:

<Installation media>:\Setup\Client\setup.exe -r

(5) The setup wizard starts. Enter the required values and perform setup. The entered values and operations performed at this time are recorded as parameter files.

(6) The parameter file setup iss for silent installation is created in the Windows system folder.

Tips

The Windows system folder by default is as follows:

Windows Server 2003/2008/2012: C:\WINDOWS

Windows 2000: C:\WINNT

For other operating systems, check the environment variable "%Systemroot%."

- Prepare the Installer.
- (1) Insert the installation media into the DVD drive, and copy the folder below located on the installation media to an arbitrary location.



For SSC product: < *Installation media*>:\DPM\Setup\Client For DPM unbundled product: < *Installation media*>:\Setup\Client

(2) Copy setup.iss that was created in advance to the folder copied in Step (1).

Preparation is completed.

- Execute Silent Installation.
- (1) From the **Start** menu, select **Run**, enter **cmd** in the open column, and click **OK**. The command prompt appears. Execute the command below.

#### Example)

When the folder is copied directly under the C drive C:\Client\setup.exe -s



- The parameter files for silent installation need to be created for each OS.
- It is recommended to check whether you can install properly with the created parameter file.
- The parameter files for installation can be used only with Windows (x86/x64).

Tips

Silent installation creates a log during installation in the folder where the installer is stored. Thus, if the installer is stored on media such as a DVD that is not capable of writing, the log files cannot be created, causing installation failure.

In such a case, specify the output destination of the log files using parameters as follows:

Setup.exe -s -f2"c:\temp\clientsvc.log"

This ends the explanation of the silent installation execution procedure.

# Appendix B Configuring the Package Web Server

As an example, describes the procedure for configuring the Package Web Server on IIS 7.0(Windows Server 2008) or IIS 7.5 (Windows Server 2008 R2)

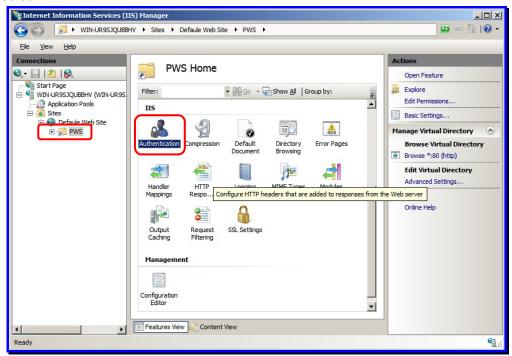
Note

If providing HTTP service or setting user authentication using IIS, enable **Basic Authentication** and disable **Common Authentication**.

Example)

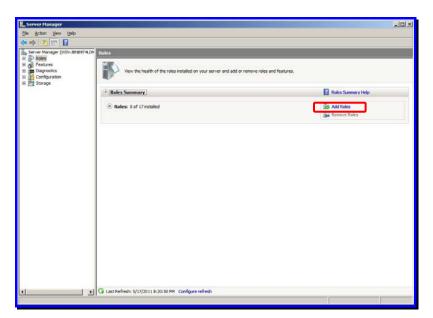
IIS 7.0 (For Windows Server 2008):

- 1) From the Start menu, select Administrative Tools -> Internet Information Services (IIS) Manager.
- 2) The Internet Information Services (IIS) Manager screen appears. Select created virtual directory from the left side of the screen and double-click Authentication on the screen.

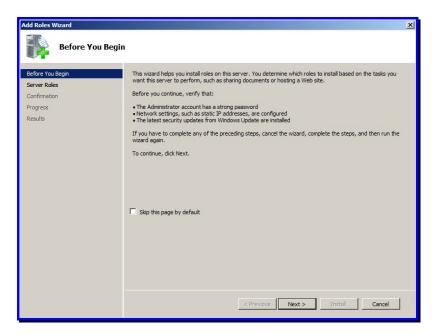


3) Right-click Basic Authentication in the middle of the screen and click Enable.

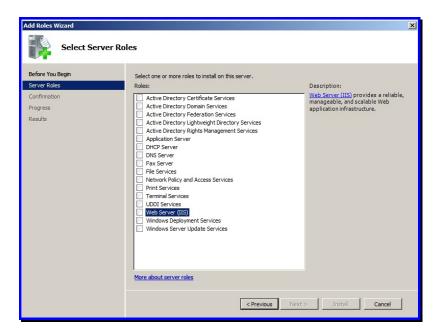
- (1) From the Start menu, select Administrative Tools -> Server Manager.
- (2) The **Server Manager** screen appears. Select **Roles** on the left-hand pane, and then click **Add Roles** on the right-hand pane.



(3) The Add Roles Wizard appears. Click Next.



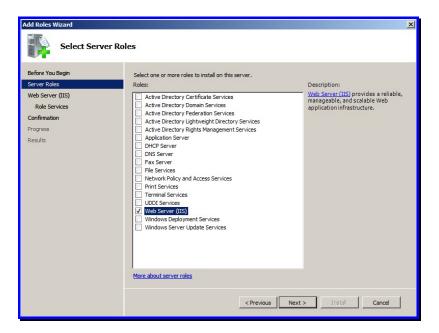
(4) The Select Server Roles screen appears. Enter a check by Web Server (IIS).



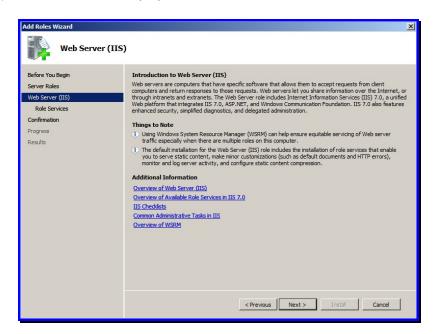
(5) The following screen appears. Click **Add Required Features**.



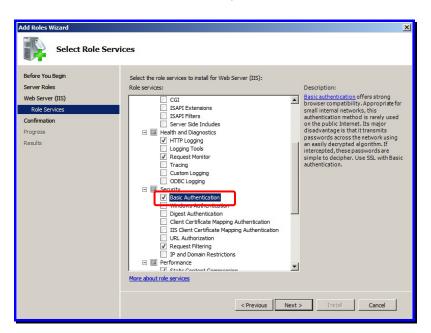
(6) The screen returns to the Select Server Roles screen. Click Next.



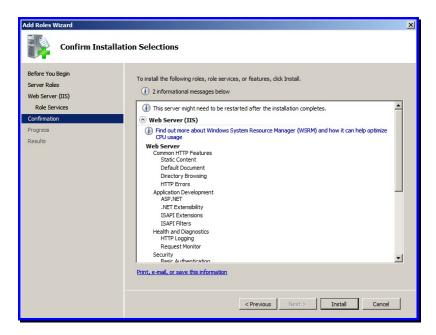
(7) On the Web Server (IIS) screen, click Next.



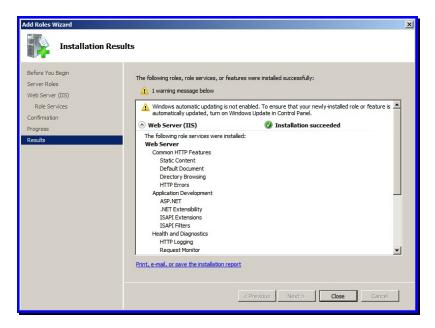
(8) On the Select Role Services screen, check Basic Authentication and click Next.



(9) On the Confirm Installation Selections screen, click Install.



(10) On the Installation Results screen, check the installation details and click Close.



(11) Create a folder that can be accessed from PackageDescriber.

Note

- If you want to specify a share folder of Windows machines in the network for the **Web shared folder**, it is recommended that you assign the folder to the network drive in advance. If the folder is not assigned to the network drive, it may fail to access to the share folder of the network computer.
- Confirm that the Web shared folder has read and write attributes.
- The created package will be stored in the **Web shared folder**. Be sure to secure enough free space.

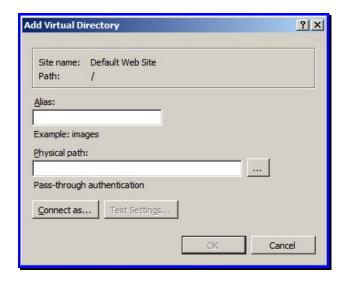
Tips You can install PackageDescriber on the same machine as the Package Web Server.

- (12) From the Start menu, select Control Panel -> Administrative Tools -> Internet Information Services (IIS) Manager.
- (13) The Internet Information Services (IIS) Manager screen appears. Right-click Default Web Site and click Add Virtual Directory.

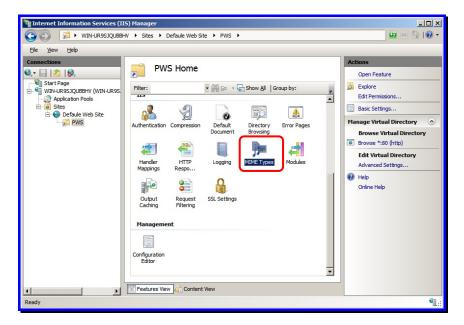


(14) The Add Virtual Directory screen appears. Click OK after the following settings.

·Alias : Optional alias name ·Physical path : Folder created in (11)



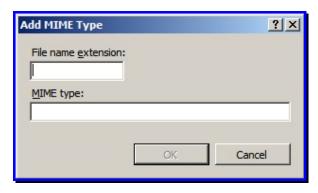
(15) To download service packs/hotfixes/applications of Windows Server 2008/Windows Vista/Windows 7, double-click **MIME Types** in the middle of the screen.



- (16) The **Mime Types** screen appears in the middle of the screen and click **Add...** on the right side of the screen.
- (17) The **Add Mime Type** screen appears. Click **OK** after the following settings.

·Extension: msu

·Mime Type: application/octet-stream



(18) Using the same procedure as in Steps (16) to (17), enter msp as the extension and application/octet-stream as the MIME type.

# **Appendix C** Configuring NFS Server

The method described below is for constructing the NFS Server on DPM Server (Windows Server 2008).

For precautions when installing the NFS Server on a different machine, see Section 3.5.6, "Precautions/Other" in *Operation Guide*.

- (1) Install "Service for NFS (Network File System)" on the Management Server. For installation, see the manual with the product. You will need to restart the machine after installation.
- (2) Set the exports folder under the **Folder for Image** set on the Web Console as an NFS shared folder. (Shared name: exports)

Note

- To set the NFS shared folder (exports) on Windows Server 2008, the following settings are required:
- From the Start menu, select Administrative Tools -> Local Security Policy -> Local Policies -> Security Options, enable Network access: Let Everyone permissions apply to anonymous users, and restart the Management Server.
  - (Note that when the machine participates in a domain and the domain security policy option is disabled, even if the local security policy option is enabled, the option will become disabled. For a domain controller, change the domain controller security policy instead of the local security policy).
- 2) Open the Properties dialog box of the exports folder, click Security tab, add Everyone, and select Read & Execute in the permissions area. Note that the Read permission is unproblematic for only the ks folder under the exports folder.
- When you perform OS clear installation on Red Hat Enterprise Linux 6, configure NFS Server except on Windows Server 2012. Also, see Section 10.4. "Notes for OS Clear Installation" in *Reference Guide*.

Tips

To create an NFS shared folder in Windows Server 2008 R2, configure as below.

- Right-click exports folder properties.
- The property of the folder is displayed. Click Manage NFS Sharing on NFS Sharing tab
- NFS Advanced Sharing screen appears. After configuring the following, click OK.
  - Select the Share this folder checkbox and select Allow anonymous access.
  - Click Permissions button and check Allow root access.

If you want to construct the NFS Server on Linux, see the following.

- To start NFS server on Linux, execute the following commands:
  - # /etc/rc.d/init.d/portmap restart
  - # /etc/rc.d/init.d/nfs stop &> /dev/null
  - # /etc/rc.d/init.d/nfs start
- To enable NFS services at startup, execute the following commands:
  - # /sbin/chkconfig --level 345 portmap on
  - # /sbin/chkconfig --level 345 nfs on

# Appendix D Configuring Database Server

This chapter describes how to configure the Database Server(the different machine from the Management Server).

- Configuring the database.
- (1) Log on to the Database Server by the user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and install.

(2) Create an instance, seeing the page of Microsoft Corporation(the following). http://technet.microsoft.com/en-us/library/ms143219.aspx

Note

Be careful about the setting contents of SQL Server Installation Center.

- The Feature Selection screen: Select Database Engine Services and SQL Server Replication.
- The **Instance Configuration** screen: Enter the instance name(Arbitrary).
- The Server Configuration screen: Set in the startup type of SQL Server Browser to disabled.
- The Database Engine Configuration screen: Set the following in the Server Configuration tab.
- Select Mixed Mode (SQL Server authentication and Windows authentication) in Authentication Mode.
- Specify the password (Specify it in 30Byte or less. The allowed characters are single-byte alphanumeric characters/symbols.) in **Specify the password for the SQL Server system administrator(sa) account**.
- Specify SQL Server administrators by clicking Add Current User.
- (3) Start the command prompt and execute the following command. (The following command is described in two lines. Enter it by one line in the actual screen.)

SQLCMD.EXE -E -S ".\Instance Name" -Q "alter server role [sysadmin] add member [NT AUTHORITY\SYSTEM]"

Example)

SQLCMD.EXE -E -S ".\DPMDBI" -Q "alter server role [sysadmin] add member [NT AUTHORITY\SYSTEM]"

- (4) Select Run from Start menu. Enter "regedit" in the name of the program to execute and click OK.
- (5) Registry editor is started. Add the following registry keys.
  - Key:
    - When OS is x86

HKEY LOCAL MACHINE¥SOFTWARE¥NEC¥DeploymentManager DB

- When OS is x64
  - HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager\_DB
- Name: DBInstallDir
- Data: C:\Program Files\Microsoft SQL Server\MSSQL11. Instance Name\MSSQL\DATA
- Name: VersionDatabase
- Data: 6.20
- Name: DBInstanceName
- · Data: Instance Name

Note

If you mistake the use of Registry Editor, the serious problem may occur. Be careful about editing the registry.

(6) Start the command prompt and execute the following command.

(The following command is described as two lines. Enter it by one line in the actual screen.)

SQLCMD.EXE -E -S ".\Instance Name" -i "<Installation media>\Setup\DPM\db\_install.sql" -o "Full Path of Log File"

Example)

SQLCMD.EXE -E -S ".\DPMDBI" -i "E:\Setup\DPM\db\_install.sql" -o "C:\temp\DBInst.log"

Note

Specify the existing folder in Full Path of Log File.



For SSC product:<*Installation media*>:\DPM\Setup\DPM\db\_install.sql For DPM unbundled product:<*Installation media*>:\Setup\DPM\db\_install.sql

(7) Check that the following information is output in the file, which is specified in *Full Path of Log File* of (6).

(8) Create a user who accesses the created instance.

When you access it by "sa" user of SQL Server, this procedure is not necessary. Go to (9). When you access it by other users, start the command prompt and execute the following command.

C:\>sqlcmd -E -S .\Instance Name

1> CREATE LOGIN *User Name* WITH PASSWORD='*Password*, DEFAULT\_DATABASE=DPM

1> EXEC sp\_addsrvrolemember '*User Name*', 'sysadmin'

2> go

1> exit

Example)

C:\>sqlcmd -E -S .\DPMDBI

1> CREATE LOGIN username WITH

PASSWORD='password123\$%',DEFAULT\_DATABASE=DPM

2> go

1> EXEC sp\_addsrvrolemember 'username', 'sysadmin'

2> go

1> exit



- Specify *User Name* in 30Byte or less. The allowed characters are single-byte alphanumeric characters.
- Specify *Password* in 30Byte or less. The allowed characters are single-byte alphanumeric characters/symbols.
- (9) From Start menu, select -> Microsoft SQL Server 2012 -> -> -> .
- (10) **Sql Server Configuration Manager** appears. After clicking **of** *Instance Name* under on the tree view, right-click **TCP/IP** in the right side of the screen and select **Property**.
- (11) TCP/IP Property screen appears. After setting the following, click OK.
  - · Protocol tab: Set Yes in .
  - IP Address tab: Set "26512" in TCP Port under IPAII.



When you set the port number except TCP:26512(Default), change the port of **RemoteDBServer** in Port.ini of DPM Server.

For details of the procedure, see Section 9.5, "Procedure to Change the Port Used by DPM" in *Reference Guide*.

- (12) From Start menu, select Administrative Tools -> Services. Services screen appears.
- (13) Restart the following service.

SQL Server(Instance Name)

(14) Start the command prompt and execute the following command.

(The following command is described as two lines. Enter it by one line in the actual screen.)

C:\>netsh firewall set portopening protocol=TCP port=26512 name=DPM\_SQLPort mode=ENABLE scope=SUBNET profile=CURRENT

- Uninstalling the database.
- (1) Log on to the Database Server by the user with Administrator authority.



In the case of Windows Server 2012 or Windows 8, be sure to log on with Administrator user and uninstall.

- (2) Uninstall the instance, seeing the page of Microsoft Corporation(the following). http://technet.microsoft.com/en-us/library/ms143412.aspx
- (3) Delete all files under the following folder.

  C:\Program Files\Microsoft SQL Server\MSSQL11. Instance Name\MSSQL\Data
- (4) Select Run from Start menu. Enter "regedit" in the name of the program to execute and click OK.
- (5) Registry editor is started. Delete the following registry keys.
  - When OS is x86

HKEY\_LOCAL\_MACHINE\SOFTWARE\NEC\DeploymentManager\_DB

When OS is x64
 HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager\_DB



If you mistake the use of Registry Editor, the serious problem may occur. Be careful about editing the registry.

# Appendix E Upgrading SQL Server

About the procedure to upgrade SQL Server, contact your sales or support representative.

# Appendix F Configuring DPM Server and MasterScope Network Manager on the Same Machine

When you install DPM Server on the machine on which MasterScope Network Manager is installed, TFTP services of MasterScope Network Manager and DPM are conflicted and each TFTP service may not work properly.

In this case, you do not use TFTP service of DPM and need to set so that DPM cooperates with TFTP service of MasterScope Network Manager.

For details on the cooperation and so on, see also the User's Manual of MasterScope Network Manager.



Perform the following configuration only if the IP address of the MasterScope Network Manager and DPM is duplicated.

- To install DPM Server on the machine on which MasterScope Network Manager is installed, follow the procedure below:
- (1) From the **Start** menu, select **Administrative Tools** -> **Services** on the Management Server, and then open the **Service** screen.
- (2) Stop all services of MasterScope Network Manager.
- (3) Install DPM Server.

For details, see Section 2.1 "Installing the DPM Server."

Set the following in TFTP Server tab in Detail Setting screen when installing DPM Server.

- Select Do not use the TFTP service of DPM.
- Specify TFTP root of MasterScope Network Manager in TFTP root.
- (4) Seeing the information about the conflict of TFTP server with other software on MasterScope Network Manager install server in the User's Manual of MasterScope Network Manager, modify the contents of the nvrmap.ini file and reboot the machine.
- To install MasterScope Network Manager on a machine on which DPM Server is installed, follow the procedure below:
- (1) From the **Start** menu, select **Administrative Tools** -> **Services** on the Management Server, and then open the **Service** screen.

(2) Stop the following services:

DeploymentManager API Service

DeploymentManager Backup/Restore Management

DeploymentManager Get Client Information

DeploymentManager PXE Management

DeploymentManager Remote Update Service

DeploymentManager Schedule Management

DeploymentManager Transfer Management

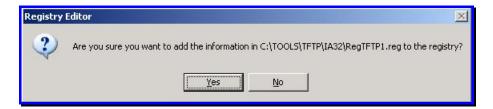
- (3) Stop the following service, and then change to **Disabled** in **Startup Type**. DeploymentManager PXE Mtftp
- (4) Insert the DPM installation media into the DVD drive on the Management Server.
- (5) Execute the following operations according to the OS architecture in use.
  - x86: Execute the following files in the installation media.

For SSC product :\DPM\TOOLS\ TFTP\IA32\RegTFTP1.reg
For DPM unbundled product :\TOOLS\TFTP\IA32\RegTFTP1.reg

• x64: From the **Start** menu, select **Run**. Enter "%WINDIR%\SysWOW64\cmd.exe" for the name of the program to execute, and then click **OK**. The command prompt appears. Execute the following file from the command prompt.



(6) The following screen appears. Click Yes.



(7) The following screen appears. Click **OK**.



- (8) See the User's Manual of MasterScope Network Manager and install MasterScope Network Manager.
- (9) Copy all of the files under < DPM Server installation folder>\PXE\Images to MasterScope Network Manager's TFTP root folder. (For the MasterScope Network Manager TFTP root folder, see the User's Manual of MasterScope Network Manager.) Make sure that you do not delete files under < DPM Server installation folder>\PXE\Images in this step.

- (10) From the **Start** menu, select **Run** on the Management Server. Enter "regedit" for the name of the program to execute, and then click **OK**.
- (11) Registry Editor starts up. Please change the following registry:

## Registry path

x86:HKEY\_LOCAL\_MACHINE\SOFTWARE\NEC\DeploymentManager x64:HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager

Value name	Value data
GPxeLinuxCFGDir	<tftp folder="" manager="" masterscope="" network="" of="" root=""></tftp>
PxeDosFdDir	<tftp folder="" manager="" masterscope="" network="" of="" root="">\DOSFD</tftp>
PxeHwDir	<tftp folder="" manager="" masterscope="" network="" of="" root="">\HW</tftp>
PxeHW64Dir	<tftp folder="" manager="" masterscope="" network="" of="" root="">\HW64</tftp>
PxeLinuxDir	<tftp folder="" manager="" masterscope="" network="" of="" root="">\pxelinux</tftp>
PxeNbpDir	<tftp folder="" manager="" masterscope="" network="" of="" root="">\lambda NBP</tftp>
PxeNbpFdDir	<tftp folder="" manager="" masterscope="" network="" of="" root="">NBP</tftp>

## Registry path

x86:HKEY\_LOCAL\_MACHINE\SOFTWARE\NEC\DeploymentManager\PXE\Mtftpd x64:HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager\PXE\Mtftpd

Value name	Value data
BASE_DIR	<tftp folder="" manager="" masterscope="" network="" of="" root=""></tftp>

(12) Seeing the information about the conflict of TFTP server with other software on MasterScope Network Manager install server in the User's Manual of MasterScope Network Manager, modify the contents of the nvrmap.ini file and reboot the machine.



If IP address of the Management Server was changed after the above configuration, perform steps (4) to (7) again.

- To uninstall MasterScope Network Manager, follow the procedures below.
- (1) Copy all of the files under MasterScope Network Manager's TFTP root folder to < DPM Server installation folder>\PXE\Images. After the files are copied, delete all files under the TFTP root folder of MasterScope Network Manager. (For the MasterScope Network Manager TFTP root folder, see the User's Manual of MasterScope Network Manager.)
- (2) Uninstall MasterScope Network Manager.
- (3) From the **Start** menu, select **Administrative Tools** -> **Services** on the Management Server, and then open the Service screen.
- (4) Stop the following services:

DeploymentManager API Service

DeploymentManager Backup/Restore Management

DeploymentManager Get Client Information

DeploymentManager PXE Management

DeploymentManager Remote Update Service

DeploymentManager Schedule Management

DeploymentManager Transfer Management

(5) Insert the DPM installation media into the DVD drive on the Management Server.

- (6) Execute the following operations according to the OS architecture in use.
  - For x86: Execute the following files in the installation media.



For SSC product:

<Installation media>:\DPM\TOOLS\TFTP\IA32\RegTFTP2.reg

For DPM unbundled product:

<Installation media>:\TOOLS\TFTP\IA32\RegTFTP2.reg

• For x64: From the **Start** menu, select **Run**. Enter "%WINDIR%\SysWOW64\cmd.exe" for the name of the program to execute, and then click **OK**. The command prompt appears. Execute the following file from the command prompt.



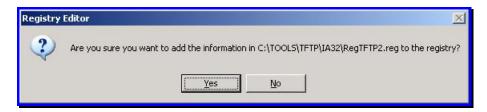
For SSC product:

<Installation media>:\DPM\TOOLS\TFTP\AMD64\RegTFTP2.reg

For DPM unbundled product:

< Installation media>:\TOOLS\TFTP\AMD64\RegTFTP2.reg

(7) The following screen appears. Click Yes.



(8) The following screen appears. Click OK.



- (9) From the **Start** menu, select **Run** the Management Server. Enter "regedit" for the name of the program to execute, and then click **OK**.
- (10) Registry Editor starts up. Please change the following registry:

Registry path

x86:HKEY\_LOCAL\_MACHINE\SOFTWARE\NEC\DeploymentManager x64:HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager

Value name	Value data
GPxeLinuxCFGDir	<pre><dpm folder="" installation="" server="">\PXE\Images</dpm></pre>
PxeDosFdDir	<pre><dpm folder="" installation="" server="">\PXE\Images\DOSFD</dpm></pre>
PxeHwDir	<pre><dpm folder="" installation="" server="">\PXE\Images\HW</dpm></pre>
PxeHW64Dir	<pre><dpm folder="" installation="" server="">\PXE\Images\HW64</dpm></pre>
PxeLinuxDir	<pre><dpm folder="" installation="" server="">\PXE\Images\pxelinux</dpm></pre>
PxeNbpDir	<pre><dpm folder="" installation="" server="">\PXE\Images\NBP</dpm></pre>
PxeNbpFdDir	<pre><dpm folder="" installation="" server="">\PXE\Images\NBP</dpm></pre>

## Registry path

x86:HKEY\_LOCAL\_MACHINE\SOFTWARE\NEC\DeploymentManager\PXE\Mtftpd x64:HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\NEC\DeploymentManager\PXE\Mtftpd

Value name	Value data
BASE_DIR	<dpm folder="" installation="" server="">\PXE\Images</dpm>

- (11) From the **Start** menu, select **Administrative Tools** -> **Services** on the Management Server, and then open the Service screen.
- (12) Set the **Startup Type** to **Automatic** for the following service, and then reboot the machine. DeploymentManager PXE Mtftp

# **Appendix G Revision History**

◆ First Edition(Rev.001)(2013.10): New

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